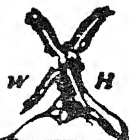


THE ROMANCE OF THE MOVIES

BY

LESLIE WOOD



WILLIAM HEINEMANN LTD
LONDON :: TORONTO

FIRST PUBLISHED 1937

PRINTED IN GREAT BRITAIN AT
THE WINDMILL PRESS, KINGSWOOD, SURREY

TO

GIRDA TERRY

CONTINUITY GIRL THROUGHOUT
THE PRODUCTION

ILLUSTRATIONS

<i>The Great Train Robbery</i>	<i>Frontispiece</i>
<i>Dog versus Pipe</i>	FACING PAGE
<i>Brighton in 1896</i>	46
G. M. Anderson (Broncho Billy)	
Shop Show Cinema in Old Kent Road	56
"The Angel Appears to Judith"	
"The Deed Accomplished"	80
An Early Home of British Films—Cricks & Martin Studio	
"Take that, you cad!" from <i>For Baby's Sake</i>	92
"The Scene of Lt. Rose's Exploits"—Clarendon Studio	
<i>Milling the Militants</i>	96
An Old-Time Open-Air Stage	
The Barker Studio, Ealing	102
<i>Rescued by Rover</i>	
Stewart Rome in <i>The Prodigal Son</i>	112
D. W. Griffith Directs his First Talkie	130
Mary Pickford in <i>The Old Actor</i>	
Mary Pickford To-day, with Leslie Howard in <i>Secrets</i>	142

	FACING PAGE
<i>The Birth of a Nation</i>	200
A Bird's-eye View of the Metro-Goldwyn-Mayer Studios	214
Kathlyn Williams in <i>The Leopard's Foundling</i> The Custard Pie Tries to Survive the Coming of the Talkie; Mack Sennett's <i>Hollywood Theme</i> <i>Song</i>	220
John Bunny as Mr. Pickwick Harold Lloyd	224
Von Stroheim in <i>Foolish Wives</i> Lon Chaney in <i>The Hunchback of Notre-Dame</i>	230
Ramon Novarro in <i>Ben Hur</i> The late Rudolph Valentino	240
A Strip of Sound Film	256
Al Jolson in <i>The Jazz Singer</i>	268
Boat Race of 1898	284
Tragic Death of Dunfee Battle of Sidney Street	286
"The Scene as the Stage Hand sees it" "And as the Audience sees it"	302
The Sound Recorder 'mixes' the Sound in his Cabin "Marian Ponders Over Her Loneliness"—Billie Burke in <i>Christopher Strong</i>	312

CHAPTER ONE

FORTY years of work, hope, tragedy, self-sacrifice and crookedness—a veritable whirlpool of all that is best and worst in human nature—have gone to the making of the talkie of to-day.

Its birth was a flickering, almost unrecognisable shadow. Its future is still in the realms of the unknown. This is the way of it—

The story starts at 34, Gay Street, Bath, where a penny reading is in progress.

Not much connection between this humble form of entertainment in which chapters from the works of great masters are read by local elocutionists and the cinema of to-day, but, wait a moment, there is something different about this penny reading, for it is to be followed by an experiment; a young photographer is going to exhibit ‘a picture which moves.’ Everyone knows how ridiculous and absurd that is. Just fancy a picture moving!

In the darkness, the homely little audience sits waiting to see a few magic lantern slides thrown on the sheet suspended above the reader’s rostrum, but, instead of the customary views or biblical pictures, there is thrown the flickering photographic image of a girl.

To the astonishment of the audience, her eyes suddenly move from left to right, from right to left.

No magic lantern picture this, but something real,

alive, vivid! In short, a picture which does, in fact, move.

With a cry of astonishment, an old lady rises from the audience and, marching down the gangway, stops before the screen and pokes a finger at the moving eyes; instead of the flesh-and-blood reality she imagines is responsible for this miracle, her finger merely dents the sheet, and the wondering audience is convinced that this is no trickery of human eyes looking through holes bored in a sheet, but actually the fulfilment of the young photographer's promise.

Months of hard work on a camera costing £150 had gone to the creation of that first moving photograph. A Mr. William Friese-Greene, photographer, of Bath, had laboured day and night in his workshop to bring about this miracle.

He knew his achievement was epoch-making, but it is unlikely that even he realised that a new phase in entertainment had been born and the foundations laid for one of the biggest industries in the world.

Fired with the success of its first public presentation, Friese-Greene showed his animated picture, as he called it, to a meeting of the Photographic Society, but, though it created a fair amount of interest, he was disappointed because its general reception was far from being wildly enthusiastic.

It was the first disappointment he was to receive, but by no means the last. To Friese-Greene's lot fell a train of misfortunes such as has never been depicted on the screen; he encountered disappointment and penury in full measure, but with this difference—

applause and recognition were never his. The tragic blows of fate buffeted his life to the end of his days.

Despite the lukewarm reception of the Photographic Society and still flushed with his first success, William Friese-Greene, all unwitting of the tragic future which lay before him, continued with his experiments.

Remember, this was in the days when photography itself was still new, days in which the usual mode of transport was by horse carriage or rumbling horse-bus, an era when electricity had yet to conquer the world. Charles Chaplin, Mary Pickford, Greta Garbo and Valentino were still unborn. The invention of the incandescent gas mantle was acclaimed the scientific achievement of the day!

"The Girl with the Moving Eyes," as we may call that first immature moving picture, did not satisfy its ambitious inventor. In place of the ribbons of paper soaked in castor oil, to make them transparent, on which he had taken his first primitive movies, including a street scene in Brighton in 1888, he wanted a flexible substitute which should have all the crystal transparency of glass and a toughness the flimsy paper did not possess. To this end, he purchased raw celluloid and sat up night after night in a room filled with the steam of thirty kettles in an endeavour to clarify the crude material into a semblance of the perfect base for his minute photographs. An ordinary mangle served to compress it to the requisite thinness. While thus working upon it he conceived the idea of perforating the margins in order to provide a means of steadying the film as it passed through the lantern, thus

obviating its tendency to skid. He patented this idea, but abandoned it in later experiments, a noteworthy point, for to-day the perforated edge is indispensable.

Again success crowned his efforts, and, in 1890, at Number Twenty, Brooke Street, Holborn, he developed and printed the very first moving picture photographed on an endless band of celluloid film.

Breathlessly, his fingers fumbling with excitement, he rigged up a screen at the end of his laboratory, turned up the lamp in his primitive projector and started to crank the clattering handle. Hansom cabs and tottering pedestrians flickered round Hyde Park Corner in a twenty-second movie which he had taken in January, 1889. (A section of it may be seen in the Science Museum at South Kensington.)

His excitement knew no bounds; rushing hither and thither like a man demented, he found himself in the street clutching at a passing policeman and babbling to him of the wonder he had wrought.

The constable decided to investigate the cause of the uproar. Accompanying the young inventor back to his laboratory, he watched with bulging eyes while the frail film was re-threaded on the crude projection machine. Then, as cabs and passers-by once again jogged their way round Hyde Park Corner on the makeshift screen, the constable found himself giving way to the same excesses of astonishment which had gripped their creator a few minutes before.

Who the constable was, and whether he is still living, are now only matters for conjecture; no record exists of his name or number, yet he constituted the world's

very first cinema audience.

William Friese-Greene's enthusiasm was shared by the leading trade paper of the day, *The Optical Magic Lantern Journal and Photographic Enlarger* (the "father" of the *Kinematograph Weekly* of to-day), which wrote, following Friese-Greene's successful application for a patent (dated June 21st, 1889) for his camera:

"Some very novel improvements, in which the lantern plays an important part, have recently been made, and it seems probable that in years to come we shall, by the aid of photography, the phonograph, and the optical lantern, be able to hear and see the facial expression accompanying recitations and songs uttered by our artistes of the present day. We may then expect to find in dealers' catalogues such entries as: The Bay of Biscay cylinder for the phonograph with set of facial expressions of Mr. — as sung by him at the Albert Hall in 1899.

"It would doubtless seem strange if upon a screen a portrait (head) of a person were projected, and this picture slowly became of an animated character, opened its mouth and began to talk, accompanied by an ever-changing countenance, including the formation of the mouth as each peculiar sound is uttered; or if, instead of one head, two were produced, and an argument gone through with all the turns and twists of the head incidental to such.

"It would also appear curious to have a street scene depicted on the screen, and for the spectators to wit-

ness the various horses and vehicles running past in all directions, persons walking to and fro, and dogs running along, all at varying speeds, and with life-like motion, and not go past in a gliding manner—all this not as silhouettes, but with all detail.

“Strange as all this may seem, it is now an accomplished fact, and the optical lantern will shortly be considered a *sine qua non* as a recording instrument.

“Imagine the sensation that would be produced if the whole of the recent Lord Mayor’s Show were to be presented upon a screen exactly as seen by a person stationed at one particular point looking across the street. The houses on the opposite side would remain stationary, and the procession would pass along, each minute movement, as it actually took place at this given point, being represented.

“The name of Friese-Greene, the eminent photographer, of Brooke Street, will become familiar throughout the land in connection with an invention by which all these effects can be produced.”

There was much more in the same vein. It is with those last-quoted words that we are mainly concerned. How many people out of the twenty-four millions who visit the cinemas of this country every week have even heard the name of William Friese-Greene, of Bath, or, in fact, know that the cinematograph was the invention of an Englishman? Doubtless that bit of journalistic prophecy seemed perilously like romancing to the man who wrote it. Yet it has all been fulfilled up to the hilt. Only the last forecast of all failed to come true.

Friese-Greene's next production was a film in which a skeleton danced and gyrated in a terrifying manner. It had its première in a shop window at 92, Piccadilly, close to the Naval and Military Club. The premises were occupied, by the inventor himself, as a portrait studio. The whole of the window except a square in the middle was pasted over with brown paper, and in the vacant space was mounted a sheet of thin white paper on which the film was projected from behind.

Unsuspecting passers-by were startled to see a demon skeleton writhing in horrible contortions.

The crowd outside grew and grew as spectators came running to view the new marvel. Hidden by the protecting brown paper, a small page-boy turned the handle of the projection machine with gusto. After a time Friese-Greene was called away, but the boy continued to turn the handle with such good effect that soon the whole width of Piccadilly was jammed by the crowd. Then the police arrived and ordered the proprietor of the shop to stop his novel advertising stunt before the whole of the West End became paralysed.

Friese-Greene was more astounded than the police; his invention which had been received so half-heartedly by learned bodies had seized upon the imagination of the ordinary stolid man-in-the-street in no uncertain manner.

He ordered the boy to stop turning the handle forthwith, but the lad, with all the instincts of the true showman, refused to deny the clamouring public of its pleasure and stolidly went on cranking. There was nothing else for it but for Friese-Greene and the police

to tear the unwilling lad away from the machine by force.

From the moving picture Friese-Greene turned his attention to inventions connected with X-rays, wireless, electrical transmission of images, inkless printing, explosives, and airships. But his attention always reverted to pictures which moved, even to the neglect of his business, and the year 1891 saw him committed to Brixton Prison for debt. While in prison, the whole of his household effects, including his original cinematograph apparatus, were sold by auction. Who the purchasers were no one knows. Knocked down, in some cases for a few shillings, the lots were carted from the auction-room by chance purchasers who had no conception of their importance. To this very day their whereabouts—if, indeed, they still exist—is unknown.

On his release from prison, Friese-Greene's patents were allowed to lapse for want of funds, and a few remaining items of apparatus and laboratory fittings had to be put up for sale. Yet, nothing daunted, he put the shadows of the past behind him and set to work again creating shadows of the present. By 1892 he had once more perfected a movie camera.

During the years which ensued he experienced ups and downs such as fall to the lot of few men. At one period of his life he owned more than forty successful photographic establishments. In all, he spent more than £16,000 in his pursuit of the living picture which would measure up to the high standard of perfection which he had set his heart on attaining. Much of his money, too, was spent on perfecting colour films. In

1916 his resources again sank to a low ebb, and an appeal was made to the figure-heads of the motion picture industry, many of whom made more in a year from movies than Friese-Greene spent upon them in the whole of his life, to subscribe to a public subscription list to provide himself and his family with the bare necessities of life.

The appeal realised the sum of £136 os. 2d.

On May 5th, 1921, he went to a meeting at the Connaught Rooms which had been called to decide whether Britain should continue to produce its own pictures or for ever submit to American domination. Lord Beaverbrook was in the chair.

Film producers, distributors, and cinema managers had declared their intention of thrashing the matter out, but, from the very outset of the meeting, it was only too clear that there was a strong feeling abroad that America had entrenched itself too firmly ever to be ousted by British pictures. Quietly, an elderly man rose in the body of the audience and pleaded for a hearing. Few of those around him knew him or had even heard his name. It was William Friese-Greene.

He pleaded with his hearers to sink their differences and petty squabbles and make yet another bid to make British pictures supreme on British screens.

From indifference, the audience warmed to the eloquence of this stranger among them. The result was an overwhelming vote in favour of the continuance of the production of British pictures.

In the excitement, scarcely anyone noticed Friese-Greene resume his seat. A few seconds later, those sit-

ting near him were horrified to find that he was dead in his chair.

Great limousines purred at the kerb outside to bear away the august ones of the cinema industry, but the greatest of them all was wheeled away on a hand ambulance brought round by two police-constables.

A police-constable had been Friese-Greene's very first cinema audience; a police-constable bore the Master away from the scene of his last victory.

He had invented the movies. With his last breath he had pleaded for their manufacture to be continued in the land of their birth.

That night the police handed Friese-Greene's son the few belongings his father had carried on his person. Among them was a battered purse. When the young man emptied it, 1s. 10d. was revealed.

It represented Friese-Greene's total worldly wealth. It was the reward of a lifetime given to creating and perfecting the magic movie mill which ground out millions—for others.

He was buried in Highgate Cemetery, and the monument over his grave bears the inscription:

William Friese-Greene
The Inventor of Kinematography
His Genius bestowed upon Humanity
The boon of Commercial Cinematography
Of which he was the first inventor and patentee.

The only other monument to his memory is a plaque high up on the front elevation of the recently erected

Gaumont Palace at Chelsea.

But, if the reward of a lifetime devoted to perfecting the moving picture was a handful of coppers, the real memorial to his life of sacrifice is to be found in every busy street in every city—the cinema theatre.

CHAPTER TWO

THOUGH Friese-Greene trod the pioneer trail alone, unknown to him, and to each other, many men of inventive turn of mind were trying in the eighties to win the prize which he ultimately won. Not all their efforts were crowned with success. Some, too, gained praise for ideas which had, all unknown to them, been forestalled by others.

It is a curious coincidence that California, the present home of the leading American film studios, should be the scene of one of the earliest and crudest attempts to create moving pictures.

About 1872, some few years before Friese-Greene perfected his apparatus for showing celluloid films, Eadweard Muybridge, a native of Kingston-on-Thames, was employed by the United States Government in California in making a geodetic survey. One day he was approached by a number of local horse-owners, who had been engaged in an interminable argument, to decide whether a horse did or did not have all four legs off the ground at any point of its stride when galloping.

Alas for their hopes, this was a question which Muybridge, with all his scientific knowledge, could not answer. It was a problem which had confronted artists all down the centuries. As Muybridge went about his daily work the problem kept on nagging away at the

back of his mind. Surely there must be some way of solving the point once and for all?

A photographic record appeared to be the solution. If one could photograph the horse in all phases of motion as it galloped, he argued, it would be simple, by studying the series of photographs, to see whether at any juncture of its movements all four hoofs were off the ground at any given moment. His knowledge of photography stood him in good stead, but when one remembers that roll films were unknown and dry plates had yet to be invented, the enormity of the undertaking readily presents itself.

Undaunted, Muybridge made his plans and approached Governor Stanford, who was impressed by the Englishman's sincerity of purpose, and placed every facility at his disposal, including his stud of horses and exercising-track.

Muybridge soon realised that one camera would not be equal to the task in front of him. Twenty-four cameras at least would be necessary, but the expense was formidable. The horse-owners who had started the ball rolling came to his rescue; the hat was passed round, each contributing his share, and the necessary sum was raised.

Early one morning the great experiment took place. Like all brilliant ideas, it was simplicity itself. Twenty-four cameras were lined up in a row, a thread being attached to the shutter of each instrument and stretched taut across the race-track. A horse was then brought out and sent galloping round the track. When it came to the cameras the threads presented no barrier

and the animal rushed on without pause, breaking the threads one after another in rapid succession. It thus took twenty-four snapshots of itself in various positions during its galloping career!

Muybridge, like all those who followed in his footsteps, soon discovered that the making of a movie was by no means the simple affair it appears at first glance. His photographs lacked definition; a dazzling white fence, blazing in the fierce Californian sunshine, had faced his battery of cameras and blurred the photographs of the horses almost beyond recognition. The fence had to be tarred and the experiment gone through again, this time with more satisfactory results.

The pictures were printed on glass plates and mounted radially on the rim of a wheel so placed as to assume the position usually occupied by the slide in a magic lantern. By this crude method, Muybridge was able to project the twenty-four slides of the galloping horses in smooth succession.

There was one curious point about this form of animated picture which no movie has ever possessed since; the cameras being separated by a distance of a few inches from each other presented slightly varying aspects of the tarred fence, while the horse, by reason of the fact that it actuated each shutter when it was dead in front of each lens, appeared to leap up and down without moving forward, while the background sped backwards!

The limitations of such a crude device for making moving pictures are obvious, but Muybridge's experi-

ment achieved what it set out to do, proving conclusively that a horse *does* have all four hoofs off the ground simultaneously at certain phases of its stride.

For more than twenty years of his life Muybridge conducted similar investigations into the movements of all kinds of animals, birds, and human beings. Under the name of the Zoopraxiscope, his machine was long in demand by scientific and artistic societies.

Though Muybridge made movies, they were in no sense movies as the term is understood to-day. The use of glass plates limited the action recorded to a minimum. The number of pictures taken of each phase of action was woefully inadequate, giving but the crudest semblance of movement.

The idea of making pictures which moved had fired the imagination of half a dozen men who possessed not only the vision, but the necessary practical ability to make their dreams come true. Though Friese-Greene was the true inventor of the cinema, and his claim as such was upheld in the United States Circuit Court many years ago, in telling the story of the birth of the cinema one must not overlook the achievements of other experimenters who, independently of each other, were blazing the same pioneer trail.

It takes courage to face the unknown and the early adventurers who sought to discover the secret of counterfeiting life itself often had to face not only ridicule and contempt, but even misunderstanding on the part of their friends and relatives. One such was C. Francis Jenkins.

For months he secretly busied himself with the perfecting of a tiny little machine of cogs and gears and lenses. By profession he was a shorthand typist in the Treasury Department of the United States Government at Washington, though his home was at Richmond, Indiana, more than seven hundred miles away. Though he lived in a boarding-house, he managed to find the facilities for giving his inventive imagination full play.

One day he arose early and busied himself with careful preparations in the yard behind his lodgings. To satisfy the curiosity of his landlady and fellow boarders, he gave it out that he was going to take photographs of an actress friend. The presence of an actress was quite sufficient to disturb the placid waters of the Washington boarding-house into ripples of excitement, and interest reached fever pitch when the girl appeared and revealed herself to be none other than Annabelle, a dancer on the variety stage and a popular favourite of the day.

Dressed to represent a butterfly, Annabelle pirouetted before Jenkins' newfangled camera. The performance was of short duration, for, unknown to his fellow-guests, the inventor's arrangement with the actress was of a purely business nature; Annabelle received 25s. for her first (and last) professional appearance in the Washington backyard!

To Jenkins' fellow-boarders, life soon slipped back again into its old humdrum round, but not so for him. Unremittingly he worked on his strange apparatus until the first day of his annual vacation, when he set out

light-heartedly for home on a bicycle, safe in the knowledge that his apparatus, packed in a trunk, had gone on ahead.

Arrived at Richmond, Indiana, the citizens of his native town gave him an enthusiastic welcome. It was something of an achievement in those days to ride more than seven hundred miles on a bicycle, but Jenkins made light of the feat. Had he not been born years before the phrase was coined, he might well have made use of that expressive bit of slang, "You ain't seen nothin' yet!" As it was, he invited his friends, together with his parents, to come round that night to his cousin's jewellery shop.

Much to their surprise, he demanded a supply of electricity. Alas! his cousin's shop boasted no such up-to-date contrivance; but there was an overhead electric cable outside. Without more ado, Jenkins tapped this and calmly demanded a bedsheet! But what followed left his audience even more astounded. The apparatus which he had set up suddenly burst into a blaze of violet light and, accompanied by a strange rhythmic clanking, Annabelle appeared on the sheet executing her butterfly dance in the backyard of the Washington boarding-house!

This was no cold black-and-white shadow show, but a living vibrant Annabelle in all the splendour of one hundred-per-cent colour, for the inventor had had his movie painstakingly coloured by hand by an experienced transparency painter.

As the show progressed and Annabelle twirled faster and faster her movements grew more voluptuous and

her diaphanous garments more airy, until, at last, in the abandonment of the dance, she showed more of her person than was considered seemly in those days. The inventor's mother glanced at her husband, but he was absorbed by the mechanical miracle he was witnessing. Mrs. Jenkins' eyes then wandered from father to son—her motherly heart no doubt filled with misgivings as to the company into which her son had fallen in the wicked city of Washington. Finally, she could bear it no longer and rose and left the ungodly throng to feast their eyes on the tantalising dancer. At home she quietened her troubled thoughts with prayer and meditation.

Edison, perhaps the greatest mechanical genius of all time, has been credited again and again with the invention of the cinema. The facts show that his interest in making moving pictures was not very large.

With the invention of the phonograph he sought a means of making pictorial representations of the speakers and singers on his cylindrical phonograph records so that users of the phonograph might both hear and see the recordists.

In those days the amplifier was still undreamed of and the sounds emanating from the phonograph's sound box could only be increased in small degree by the use of a primitive tin trumpet. It was, therefore, entertainment limited to an audience of one or two persons. The moving picture accompaniment to these meagre sounds which Edison visualised, therefore, took the form of a movie which only one person could witness at a time.

With the introduction of the Eastman celluloid film in place of photographic plates, Edison found ready at hand the very medium he needed. Friese-Greene had suggested to Edison the possibility of a combination of talking machine and movie working in synchronisation, and Edison was himself the first man to bring about this seeming miracle, but with this difference, his pictures could only be witnessed by one person at a time.

He called his device the Kinetoscope; a strip of film forty feet in length passed over a series of rollers and was viewed through a powerful magnifying glass, during which time an electric lamp illuminated the film from behind, and a rapidly-rotating disc, with a slot cut in it, passed between the lens and the picture as it sped past. Edison's film moved continuously, whereas to-day each separate photograph remains stationary for a fraction of a second before giving place to the next.

Actually, there is no such thing as a moving picture. What appears to be movement is actually a succession of *still* pictures stopping for an instant on the screen before passing on; so rapidly do they follow one another the eye has not time to distinguish each separate photograph, but records only an impression of the whole succession of pictures. Twenty-four separate photographs are projected on the modern cinema screen every second, the phase of movement recorded on each being slightly different from that of the picture which precedes it and from that which follows. The human eye cannot keep pace with them, the image of each photograph remaining impressed on the retina after it has

actually left the screen, thus making it appear to blend into the next.

Edison's film depended for its illusion of movement on the slotted disc introduced between the eye of the spectator and the picture; had there been no disc the person looking through the magnifying-glass would have seen only a blurred strip of celluloid rushing by. As it was, each picture was glimpsed separately as the slot in the rotating disc passed. But, as stated above, the eye blended each succeeding picture into the last, thus gaining the impression that the figures depicted were in actual motion.

Returning from a visit to the Chicago Exhibition, Edison found his laboratory agog with excitement. A means whereby one of the Kinetoscope loops of film could be projected on a screen instead of being viewed through a peep-hole had been achieved. Suddenly, on a screen erected at one end of the laboratory, a film of Edison's chief assistant was projected. The picture smiled and bowed a greeting. "Good morning, Mr. Edison," proclaimed the figure on the screen, "I hope you are satisfied with the Kinetophonograph." This had been synchronised with a phonograph record. The film, however (because of its continuous, as opposed to the now universal intermittent movement), was crude. But it was the first talkie and the precursor of a long line of inventions which aimed at wedding sound and sight in perfect synchronisation. Right back in those early days the moving picture found its voice only to lose it again. Years later it found it again and lost it yet again. It was not until radio came to its rescue and enabled it

to rid itself of squeaking makeshifts that it became the full-throated talkie of to-day.

If Edison's Kinetoscope loops were not movies as we understand the term to-day, they lacked nothing in showmanship. One of his earliest productions was slapstick pure and simple. An assistant, Fred Ott, played the leading and, in fact, only role. He simply took a prodigious sniff of snuff and his face writhed and contorted in all the expressions of agony which a man assumes when trying to suppress a tremendous sneeze. His grimaces occupied the full forty feet to which the film ran and "The Sneeze," as this early venture in the Mack Sennett genre was called, was a phenomenal success in the automatic machine arcades and exhibition amusement halls in which coin-operated Kinetoscope machines provided peep-show entertainment.

There was a curious point about Edison's pictures which, though the Kinetoscopes have long disappeared, has a direct bearing on the film to-day. In order to impart a stop-start movement to the film, early inventors caused their strips of celluloid to be perforated with tiny holes down both margins. Toothed wheels, actuated by a cam, engaged in these perforations and pulled the film forward one picture at a time. Edison's machine had no such intermittent movement, but his films nevertheless had four rectangular holes punched on either side of each picture. Their purpose was to engage in toothed wheels which gave the film a *continuous* forward movement. Though other pioneers had but one perforation on each side of each photograph (one perforation being sufficient for the operation

of the intermittent movement) Edison's Kinetoscope films were so universal that showmen insisted on being able to show his pictures on projectors instead of in the peep-hole machine for which they were designed. This led to manufacturers constructing their movie projectors to accommodate the Edison Kinetoscope films. To this very day, the Edison four-hole perforation is the accepted standard for all films throughout the world, though the necessity for four sprocket holes on either side of each picture does not, and never has, existed so far as projection on a screen is concerned!

The Edison Kinetoscope films, from being simple little forty-feet affairs, soon lengthened out and, in 1895, James J. Corbett, the famous boxer, set out for Edison's laboratory at New Jersey to take part in a super-film.

The Edison people had realised the possibilities of a film showing an actual knock-out by the champion and had offered him a percentage on the returns from the picture. Actually, his share of the booty amounted to \$15,000, which goes to show that there was money, and big money at that, in movies forty years ago.

In order to stage a realistic knock-out, Corbett's manager 'fixed' the fight by engaging as an opponent a boxer who was easy game for the champion. Rehearsals were staged in which Corbett allowed the other to knock him about with impunity. In this way the hired opponent was given a false sense of security; he had not been told that Corbett had definitely undertaken to knock him out in the sixth round. When his man had tired himself out, Corbett planned to deliver

the knock-out blow exactly according to schedule. Unfortunately for their plans they had not reckoned with the methods of moving picture-making in those pioneer days. In the first place, on their arrival at the studio, the combatants were instructed to fight within a strictly-defined area, otherwise they would be out of focus and the whole thing would have to be done again! And the first round had hardly got into its stride when the producer called "Time!"

"They've only gone a minute," expostulated Corbett's manager. "What's the idea?"

"The camera only holds enough film to last just over a minute," the camera-man explained, "so the rounds will only be a minute each!"

Alas for Corbett's hope of tiring his opponent out! But worse was to follow. The reloading of the camera between rounds took anything from ninety minutes to two hours!

In this fashion work dragged on from ten o'clock in the morning until four in the afternoon, with Corbett's adversary as fresh as when he started. When the sixth round arrived, in which the knock-out was to take place, Corbett found that he wasn't to deliver the blow until signalled to do so by the director! Flustered, half watching the director, half watching his opponent, Corbett muffed when the signal was given, and, instead of the knock-out they had planned, his adversary merely went reeling.

"Keep him in focus!" yelled the director.

"Stand on the chalk-mark, Corbett!" roared the camera-man.

Somehow, Corbett managed to do both. The director gave the signal again, and Corbett administered a clean knock-out, but only just in time, for the film had only another foot or two to go before running out.

The early chapters of the cinema's history read more like imaginative romance than cold hard fact. Genius that he was, Edison did not foresee that the movie destined to sweep over the entire world would take the form of a picture projected on a screen and not a film viewed in an automatic machine, and that his peep-show Kinetoscopes would provide a prosaic scientific instrument-maker in far-off London, a man who had never even thought of making pictures move, with the basis for a simple but perfect piece of mechanism which made projection on a screen—steady and clear—an accomplished fact.

The scene changes to Hatton Garden—market of the dealers in precious stones. In their safes is ten thousand times a prince's ransom in jewels, and yet, in this very by-turning off humdrum Holborn, Robert W. Paul, a scientific instrument-maker, discovered something which was to spell for others wealth of such magnitude that the treasure chests of his neighbours, the dealers in precious stones, are petty cash by comparison.

The priceless jewel which he discovered was the little gadget necessary to make moving pictures perfect, a simple mechanical appliance which imparted to the film the stop-start movement which is the basic principle of all modern apparatus for taking and showing motion pictures.

How Paul, a scientific instrument-maker who had

little or no interest in moving pictures prior to his discovery, came to be the man who made the movies possible is another of those vivid little cameos of real-life drama with which the beginnings of the moving picture are liberally besprinkled.

Two Greeks walked into Paul's Hatton Garden premises one evening. They had just come from America, where they had seen Edison's Kinetoscope at the World's Fair. They planned to exploit this latest marvel of the age in England. There were only two drawbacks to the scheme—their stock-in-trade consisted of but one Kinetoscope and they had no authority from Edison to market his machine, but, fired with visions of the wealth which would be theirs if they introduced the novelty to funland proprietors and fair-ground showmen, their sense of business morality was not clouded by any misgivings as to their right to offer the machine for sale in this country. They asked Paul, as an instrument-maker, to make duplicates of the machine. Paul naturally pointed out that there were such things as patent laws, so, dissatisfied, the Greeks went away.

Paul had never seen a Kinetoscope before and was deeply interested in its mechanics. His curiosity prompted him to look up Edison's specifications at the Patent Office. To his surprise, he found that no such specifications existed. Edison thought so little of the invention that he had never bothered to take out patents in England and there was therefore nothing to stop anyone making duplicates and marketing them here. Accordingly, Paul consented to supply his customers

and decided to make a few machines for his own use.

He soon realised that the main drawback of the machine was that it only enabled one person to view the entertainment. If, he reasoned, the film could be projected on a screen in the same way as a lantern slide, the picture could be viewed by a large audience.

As has previously been stated, Edison's film moved continuously and the slotted wheel which acted as a shutter allowed each separate picture to be viewed for only *one thousandth part of a second*. If the wheel were slowed down, it was all too apparent that the pictures were *moving* pictures in more senses than one, the resultant image on the screen being nothing but a blurr, as the film moved past the lens. If each separate picture could be arrested in its movement for even a fraction of a second, Paul argued, the eye would retain the movement and there would be no blurring. But how to solve this problem was another matter.

Experiment followed experiment, until finally Paul hit upon the idea of arresting the movement of the film by introducing a queerly-shaped little wheel cut in the shape of a Maltese cross. It was this that spelt the difference between failure and success for the movies. The cut-out segments of the Maltese cross allowed a little pinion to fall into them for a fraction of a second as it revolved and, while the pinion was held in the slot, the film was momentarily held stationary behind the lens. The result was the perfect movie.

The discovery came in the early hours of the morning. Hatton Garden was deserted save for a solitary policeman on his beat guarding the treasures in the

vaults behind the shuttered windows of the diamond merchants' offices. A belated hansom went jingling on its way to Holborn Viaduct and a yawning cat rubbed its head lazily against the officer's trousers. Then, without warning, the quiet of the slumbering deserted street was shattered by excited cries.

A robbery?

A murder?

Without more ado, the policeman started off at a sprint in the direction of the uproar.

He was prepared for anything but the sight which met his eyes. In the usually dignified and prosaic premises occupied by the respectable and respected Mr. Robert W. Paul, he found the principal of the business, aided and abetted by his assistants, roaring out war-whoops of joy! And this at an hour when all law-abiding people were in bed.

The constable was annoyed at this commotion and, to appease him, Paul showed him the marvel which he had just discovered.

A police constable saw Friese-Greene's world's première of the moving picture, and it was a police constable who saw the world's première of the first *perfect* movie. True, the picture still flickered somewhat and was to flicker for many years to come, but it was an almost unbelievable advance on all that had gone before. At last the moving picture as we know it to-day had arrived.

Romance, tales of high endeavour, of hope fulfilled, of bitter disappointment, of penury and riches, there are aplenty in the annals of the cinema. More than this,

there are stories of mystery to fire the imagination of the most blasé of all detective story readers. One such is the strange story of Louis Le Prince, and here we must go back to events which, probably unknown to Friese-Greene, had, in some measure at least, anticipated his conception of a machine for producing moving pictures.

Louis Aimee Augustin Le Prince, to give him his full name, was born in Metz on August 28th, 1842. He spent much of his life in Leeds and at least five years in the United States. He was educated at the College of Bourges and of St. Louis in Paris, and he spent many years studying chemistry and physics at the University of Leipzig. His education completed, he followed the pursuits of painting and photography in the South of France and Italy. In 1866 he came to Leeds at the invitation of an old college friend, whose sister he married and whom he had previously met whilst studying painting in Paris. When the Franco-Prussian War broke out, Le Prince went to Paris and served during the Siege.

These may seem unimportant biographical details, but to the student of detective stories they will readily present themselves as real life counterparts of the kind of data which found such a prominent place in the Case Book of Sherlock Holmes, but with this tragic difference—The Strange Case of Louis Le Prince, as we may call it, is one of those inexplicable mysteries which so far no Sherlock Holmes, real or imaginary, has ever been able to solve!

On returning from the war, Le Prince founded an art school in Park Square, Leeds. Eadweard Muybridge's

glass-plate movies of the galloping horse had attracted considerable attention in contemporary artistic circles and Le Prince studied the photographs with more than ordinary interest. Seeing possibilities in animated pictures, he began experimenting, but before his experiments could bear fruit he was invited to produce panoramas at the exhibition at Earl's Court and in the U.S.A., where he visited New York and Washington.

In 1887 he returned to Leeds and continued his experiments, with the assistance of his son. A year later he produced an instrument which enabled him to photograph moving objects at the rate of twelve pictures a second in the garden of a friend at Roundhay. Later, he took a further series at the rate of twenty per second from the window of Messrs. Hicks Brothers' premises at the south-east corner of Leeds Bridge, and in 1889 he began experimenting with films made of celluloid.

Here is direct evidence from his daughter, now a middle-aged woman, that these moving pictures were an accomplished fact. "I remember him when I was a very small child indeed, always talking and thinking about this idea. He had little money, and, with such a big family, it was difficult for him to do anything practical then, but when we went to New York in the early eighties, he found some facilities for his work. My mother taught art at a deaf-and-dumb school and here he had a little room fitted for his disposal. One day—I was about fourteen at the time—I went to call him to tea. As I pushed open the door I saw on the white-washed wall some moving figures. I did not know what they were and my father shut the door quickly, but that

was one of the very first films, and I was certainly the first child to see a moving picture."

In August, 1890, Le Prince went to France on business. He travelled in the company of a Mr. and Mrs. Richard Wilson, of his native town. He left them at Bourges, to visit his brother, who was practising as an architect at Dijon.

Louis Le Prince, as you will have seen, was as much at home in France and the United States as he was in Leeds. Furthermore, he was a remarkable man, quite apart from his artistic and inventive abilities, being nearly six feet four inches in height and well built in proportion. He was extremely gentle and slow to take offence.

Louis Le Prince was last seen boarding a train for Paris on September 16th, 1890. Where he went to or what became of him after that is as big a mystery to-day as it was on that September day more than forty years ago, for, from that day to this, not one single scrap of evidence has been forthcoming to even hint at what became of this pioneer in the moving picture field! He disappeared completely. It was as though the earth had opened and swallowed him.

Did Louis Le Prince lose his memory? Detectives in England, France and other countries left no stone unturned to settle this point. They failed to find any evidence to support such an hypothesis.

Was Louis Le Prince the victim of thugs? But he was a powerful man and had spent many years of his life on the Continent; it was extremely unlikely that he would lend an ear to the tales with which tourists are

lured off the beaten track.

Was he murdered? If so, what did his assailant do with the many pieces of apparatus—bulky apparatus at that—which he had with him, for they, too, have never been heard of since.

Louis Le Prince entered the train for Paris, but did he, in fact, ever reach it?

We shall never know. His widow believed that he was the victim of foul play, removed through the agency of persons who wished to reap the benefit of his invention. A startling theory, but in support of it it should be noted that his disappearance had the effect of stultifying his patents for the statutory period of seven years, when his death was presumed by law.

Who can clear up the greatest of all the mysteries of the movies——What happened to Louis Le Prince when he entered the train for Paris on September 16th, 1890? Where is his apparatus now, supposing it still exists? Perhaps one day a forgotten cellar or attic will give up the secret. Until then the Strange Case of Louis Le Prince must remain unsolved.

CHAPTER THREE

WITH the closing years of the last century, man and science had succeeded in accomplishing the impossible—pictures which moved!

But, before the photoplay as we know it to-day was born, much film had to churn through the crude, clanking projectors of those early years.

In America news had trickled in of the achievements of Friese-Greene, Louis Le Prince and Robert W. Paul. Showmen, realising the overwhelming public interest which would attend the showing of moving pictures in public halls and theatres, waited to see what kind of machine Thomas A. Edison would produce.

Any invention bearing the imprint of his genius was assured of an ovation on the strength of his name alone. The great inventor, however, had failed to realise the enormous possibilities of motion picture projection. Showmen were clamouring for a machine which bore the name of Thomas A. Edison and beyond the Kinetoscope peep-show, Edison had not a machine capable of satisfactorily projecting a picture on a screen. So a contract was signed whereby the Edison people took over C. Francis Jenkins' invention. The young Treasury Department clerk had already sold his rights in his creation to his partner Armat, who, in turn, transferred them to Edison. Accordingly, a projector

was soon on the market bearing the imprint, "Thomas A. Edison, *Armat design*." Jenkins and Armat came to loggerheads over this step later, but all this present history is concerned with is the significance attaching to the label on the machines.

Immediately the machines were put on sale provision had to be made for a supply of films and so the very first moving picture studio in the history of the world came into existence at Fort Lee, New Jersey, U.S.A.

The term 'film studio' conjures up an enthralling picture to-day—a vision of white concrete buildings, giant sound-proof stages, of lawns and swimming pools, bungalow dressing rooms, delightful restaurants, and private projection theatres, but the first film studio was as unlike this popular conception as can be imagined. There were no wrought-iron gates to swing back to admit expensive stars in limousines, for the simple reason that there were no stars and certainly no limousines, and, as for a gate, what need was there of such an encumbrance, seeing that the studio was built on a piece of waste land adjoining the Edison laboratories and the whole world and his wife were at liberty to stare at it over the fence if they so minded! Very few people had even heard of motion pictures, let alone seen them, and fewer still displayed any curiosity as to how they were made. Audiences seldom imagined that there was any reality attaching to the bewildering pictures of horse cars in motion and waves breaking, which entertained them in those days. The thing was regarded simply as an illusion. It belonged to the realms of the

conjurer, and the moving horse car had no more reality than the smashing of eggs in a top-hat and the miraculous production of a live fowl! And that was an impression that was to last for years.

So the only people who took any interest in the Edison studio were the immediate neighbours, who irreverently nicknamed it "The Black Maria," a name which stuck to it throughout its short but highly romantic lifetime!

A contemporary account, written by W. K. L. Dickson, one of Edison's assistants, describes the studio as follows:—

"It obeys no architectural rules, it embraces no conventional materials and follows no accepted scheme of colour. Its shape . . . is an irregular oblong, rising abruptly in the centre, at which point a movable roof is attached, which is easily raised or lowered at will of a single manipulator. Its colour is a grim and forbidding black, enlivened by a dull lustre of myriads of metallic points. Its materials are paper, covered with pitch and profusely studded with tin nails. With its great flapping sail-like roof and ebon complexion, it has a weird and semi-nautical appearance, like the unwieldy hulk of a medieval pirate craft or an airship, and the uncanny effect is not lessened when, at an imperceptible signal, the great building swings slowly round upon a graphited centre, presenting any given angle to the rays of the sun . . . This remarkable structure is known as the Kinetographic Theatre, or Black

Maria, according to the mental cast of its sponsors. . . .

"As we peer into the illusive depths we seem transported to one of those cheerful banqueting halls of old, where the feudal chiefs made merry with human terrors, draping the walls with portentous black, and thoughtfully providing a set of coffins for the accommodation of their guests. And what is this mysterious cave at the other extremity, sharply outlined against the dazzling radiance of the middle ground and steeped in a hungry crimson hue . . . No dungeons are these, but simply a building for the better taking of kinetographic subjects. On the platform stand the wrestlers, dancers, and jugglers, whose motions it is desired to immortalise. Against the nether gloom their figures stand out with sharp contrast—alabaster basso relievos on an ebony ground, furnishing a satisfactory explanation for the singular distinctness of the kineto strips. The lurid cell at the other end resolves itself into a compartment for changing the films from the dark box to the camera, the apparatus being run backward over a track leading from the black tunnel at the rear of the stage to this room, after which a door is shut and the films renewed for a fresh subject.

"We have been sensible for some time to a disturbance of the ground beneath our feet, and are now aware that the building is slowly and noiselessly rotating on an axis, bringing into our range of vision the glory of the sun-rays westering to their close.

"The actors are kept as compact as possible and

exposed either to the untempered glare of the sun, or to the blinding effulgence of four parabolic manganese lamps, or to the light of twenty arc lamps, provided with highly actinic carbons, supplied with powerful reflectors equal to about fifty thousand candle-power."

Even such a detailed description cannot conjure up an adequate mental picture of the queer contraption. 'A gigantic Army tank made of tarred paper' is probably the nearest one can get to it!

In this first film studio many notabilities made brief appearances for the purpose of appearing before a movie camera. Eugene Sandow the strong man, Buffalo Bill, Madam Bertholdi, sundry music-hall stars of the day, troupes of performing dogs and even, be it noted, a couple of New York stage stars who figured in one exotic love scene (released as "The Kiss") from a great Broadway success. These and many more all strutted their brief hour in Edison's "Black Maria."

There was no such thing as a fan magazine in those days—there was no such thing as a film fan, and the Press, being little more enlightened than the public as to what a movie really was, gave scant space to the rapid developments which were taking place in the little movie world of the late nineties. Nevertheless, dramatic events *were* occurring and with lightning-like speed, both inside and outside of the first film studio.

First of all, it came to the ears of Edison that Robert W. Paul, of London, was making Kinetoscope machines and clearly something must be done to stop this poach-

ing on his preserves. Consequently two agents were sent post-haste to London to take the situation in hand.

Upon their arrival they quickly found their worst forebodings realised; Paul was selling his machines not only in London, but supplying them to continental firms and even as far afield as Japan! The fact that Edison had neglected to apply for patents and that Paul was entitled to market apparatus in countries in which Edison had not obtained protection made it impossible for the two emissaries from New Jersey to take any legal action. So they put their heads together. After lengthy investigation they were able to put their finger on the chink in Paul's armour. Galling as it was to know that Paul was duplicating the Edison machine, it was still more exasperating to know that Edison *films* were being used on those machines.

Paul could make machines, but he couldn't make films, they reasoned. Therefore, if they cornered the supply of films and stopped Paul getting any more from the Edison plant, his apparatus would be about as useful as a pen without ink.

Accordingly, they industriously set about getting hold of every film it was possible to lay hands on and very soon the Hatton Garden instrument-maker found himself besieged by disgruntled purchasers of his apparatus, who reported that the supply of movies had suddenly and inexplicably dried up!

But the Edison agents had reckoned without their host. Paul started to make his own films!

When it is remembered that Paul had hitherto engaged in the humdrum and unexciting profession of

scientific instrument-maker, his sudden incursion into the realms of film production is remarkable, while the success which he attained in this new field can only be described as miraculous. His trade-mark on films was familiar up to a few years before the Great War; his trick films and topical ones were leading attractions at countless picture halls and variety theatres for many years, and, at one time, Paul not only supplied Britain and the Continent with films, but also did a large amount of business with the United States! To-day he is no longer connected with the cinema, but lives quietly outside the realms of the hurly-burly of the film world.

The disgruntled Edison agents retired from the fray leaving Paul victorious.

He called his newly-invented projector the Theatrograph and his first public performance was given at the City and Guilds of London Technical College in Finsbury in February, 1896, followed, a few days later, by an exhibition in the library of the Royal Institution. "The audience sees upon a screen living pictures . . . ships coming into the harbour, waves breaking on the shore . . . all in a highly realistic manner," wrote the *Daily Chronicle* and went on to add, "Mr. Paul has been more than a year at work in perfecting his contrivance, and he has some startling ideas in his head . . . nothing less than, we understand, a vivid realisation of some of the imaginative scenery pictured in Mr. Wells' *Time Machine*." His first subjects were "Rough Sea at Dover," "Shoeblack at Work in a London Street," and "Scenes of an Engineer Working in a Shop," the

latter being the first attempt at interior photography, made possible by the fact that the actual workshop happened to be open to the daylight on two sides.

"My scheme for producing Mr. Wells' *Time Machine*," Paul says, "was fully developed with some assistance from Mr. H. G. Wells, and included machinery for giving the spectators a pseudo-impression of movement through time, but at that date things were not ripe for such an exhibition."

As it was, Paul set about making less ambitious subjects. Whatever the British film industry has lacked since in enterprise, it did not lack it when "Daddy Paul"—as he came to be known later—was Britain's foremost film producer; two months after the first pictures were shown, he was producing colour films! They were laboriously hand-painted at the rate of one or two separate photographs a day. Mr. Doubell, slide painter to the Polytechnic, undertook the superhuman task and the results were quite remarkable.

In the same year Paul hit upon the idea of filming topical events. He had already entered into an arrangement with the management of the Alhambra to provide a short film programme at every performance and he decided to add a 'topical' of the Derby. On the morning of the great race he went to Epsom and chartered a wagonette, on the seats of which he set up his tripod and bulky camera.

A gipsy was running a peep-show close by and, noticing the crank of Paul's camera, jumped to the conclusion that a rival showman was about to queer his pitch, so he promptly started to overthrow Paul's

wagonette. An argument ensued and the pioneer news-reel man found it quite impossible to convince the gipsy that he was no rival, but merely taking moving pictures of the race. Either the gipsy would not or could not understand, for he renewed his attacks on Paul's makeshift stand with vigour. There was no help in sight and the great race was about to begin. There was only one thing for it; unearthing some stout rope from the box of the wagonette, Paul promptly lashed the wheels of his chariot to the rails of the course. The gipsy, realising that he would be losing custom if he wasted time on untying the substantial knots which Paul had made, gave up the unequal struggle and with the worst possible grace set about minding his own business.

The resultant picture of the Derby created quite a sensation. The blasé, noisy, Alhambra audience was still in the dark in more senses than one when the turn on the programme called "Living Pictures" came on. Judge of their astonishment when, having spent a hilarious day at the Derby and finished up at the music-hall as a round-off, the theatre was suddenly plunged in darkness and, on a white screen lowered from the flies, the Derby in all its splendour was re-run before their very eyes!

The making of dramas and comedies was still unthought of at this time in England. A moving picture was still simply and solely a picture which recorded elementary movement. It had no dramatic content, no human interest, no plot or story. So long as the subjects moved, the living picture was doing all that was

expected of it, as this handbill, posted up outside the Public Hall, Godalming, in 1896, bears testimony. It is one of the first advertisements of a cinema show ever printed:—

PUBLIC HALL
GODALMING

EDISON'S ANIMATED PICTURES

Three nights only.

Seated comfortably, you can view
trains in motion—heavy seas wash-
ing over rocks—storms raging, and
trees bending gracefully in the wind.

Attracting thousands of people nightly, in
London, Paris and New York!!!

In America, however, the first faltering steps towards acted drama were being taken. Holman Eaves produced a picture of the Oberammergau Passion Play and, because of its international reputation, religious bodies made no protest against this exhibition of filmic religion, and thousands of people flocked to the halls where it was shown and revelled in the beauties of the 'mystic passion play.' One can only conjecture as to what their feelings would have been had they known that the whole thing was a fake manufactured on the

roof of the Great Central Palace, New York City!

The next move towards film drama was made by a young English journalist named J. Stuart Blackton.

Blackton was an emigrant from England to the United States, where he had lived from the age of twelve. In turns he had been carpenter, variety artist and newspaper-man. Edison's invention had set the young journalist alight with vague imaginings, and when he was sent by his paper to interview Edison and the latter showed him a fifty-foot film called "Black Diamond Express" (which was simply a cinematic record of an oncoming train) Blackton found himself more enthralled than he would have cared to admit. That one-minute show set him thinking movies day and night, and he discussed them over and over again with a friend of his former music-hall days, Albert E. Smith, whose speciality was conjuring and ventriloquism and whose hobby from childhood had been dabbling with electricity and machinery. Finally, combining their entire capital—it totalled barely £150—they started experimenting. Their first step was to buy a cinema camera and a projector, both affairs extremely imperfect, and from obscure sources secured what films there were and, out of the hotch-potch, evolved a touring music-hall 'turn.'

There was a generous amount of public enthusiasm at the beginning, but because both films and machinery were crude and quite incapable of standing up to the buffetings which they were subjected to on tour, people soon showed a lack of enthusiasm. "It was the devil's own job to keep the film on the sprockets," Smith once

told me, recalling those 'trail of '98 days,' "besides which, the film was invariably twisted, warped and distorted! And when, as frequently happened, something went wrong, the show had to be shut down until the accident was remedied. The people who were beginning to throng to see the show became disgusted—their patience was exhausted. So was ours—nearly—but we persevered to perfect our apparatus."

In time, Smith managed to improve the machine, eliminating the flicker and twisting, and the Blackton and Smith Moving Picture Entertainment once more leapt into popularity. The result was a demand for their shows which was beyond the possibility of supply unaided, so they formed themselves into a little firm and called it the Vitagraph Film Company and set about buying more machines and training operators. Things moved quickly from then on. Hitherto the only films available were fifty-feet to one-hundred-feet scenic novelties, but when Smith and Blackton were invited on a yachting cruise by a wealthy newspaper owner, they took a couple of cameras with them, one being a film camera which, so they said, "weighed about a ton."

The Spanish-American War had just broken out, and when the yacht came to anchor at Siboney they found soldiers lying in the bushes, firing vigorously at the enemy. Smith was photographing the scene when a bullet went right through the camera! Beating a hasty retreat with what film he had already secured, he produced, with the collaboration of Blackton, a short 'patriotic' picture entitled "The Spanish Flag Pulled Down," using both the actual battle-scene and a few

pecially staged trimmings of a Spanish flag being hauled off a flagstaff to heighten the effect. This effort not unnaturally caused something of a sensation in America.

Various plans had been maturing in their fertile brains and, prompted by the success of their first 'production,' they decided to make a picture which would tell a story. They had no precedent to guide them; it was a plunge in the dark. An audience could 'get' a film which showed a little girl feeding chickens or an old 'mammy' giving a little nigger boy a bath—but would they tolerate a picture which had no basis of reality, and which was really a counterfeit method of story-telling, owing little to the printed word and still less to the audible drama?

Only actual experiment could prove. They had saved a little money by this time, but were still occupying only a small room on the top floor of a skyscraper at 140, Nassau Street, New York. They embarked on their first photoplay. With only one hundred feet of film to do it in there was no margin for padding or building up atmosphere, but the enterprising young men were anxious to introduce trick photography, so a ghost picture was decided upon. A scene representing the interior of a bedroom was erected on the roof of the building in which their office was situated. Following the principle of Edison's Black Maria, the camera was mounted in a dark shed, which, in turn, was mounted on a framework of girders having a central pivot. The scene was built on flooring placed on the other extremity of the girders, so that camera, hut and scene

faced one another across a turn-table of girders, the whole unwieldy contrivance being turned round 'to follow the sun.' Only two characters took part in the production and they had to exercise extreme caution in the matter of their exits through the door in the scenery—a too hasty exit meaning a fall of several hundred feet to the street below! The film lasted about a minute and a half and here, for the curious, is the 'scenario'—

Scene 1. (A long shot, though this was not stated, because no one had yet thought of making a mid-shot or a close-up!)

A man is sitting in a room when he is visited by a ghost. The man is frightened into a grotesque exhibition of violent terror. The ghost disappears miraculously into thin air.

That was all. The spook was transparent, being introduced by means of double photography, and the effect upon the audiences who eventually viewed this production was striking. To-day, a producer seldom ventures to introduce a ghost and, even when such a trick is resorted to, it excites no comment at all, yet the Vitagraph ghost made history—it not only saw the introduction of the story film, but also the first trick effect. Who the actors were is not on record; probably they were a couple of servants belonging to the building, but their parts in "The Haunted House," paid for at the rate of a dollar or so, were to lay the foundation stones of a new profession, that of cinema actor, while the film itself had created a new industry and a new phase in

the art of story-telling. From that day movies had entered a new era.

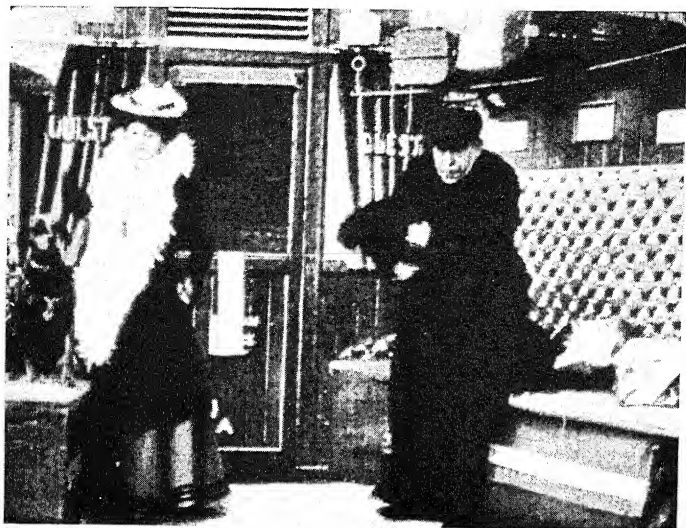
Why go on a roof to make a movie? The solution is not far to seek; work can be carried on undisturbed provided the actors take care not to fall off, but the main reason which prompted the pioneers to haul their bulky camera up on to the leads was not a desire to be nearer the sun, but to find an open space where there were no shadows to mar the photography.

Paul's productions soon followed the popular trend, though so far he had attempted nothing so ambitious as the interior scene in the American "Haunted House." One of his earliest 'story' films was "The Sweep and the Whitewasher," which was a forty-foot comedy made outside a cottage at the foot of Muswell Hill, a far different Muswell Hill in those days, being still a rural outpost of London. The picture showed a sweep colliding with a whitewasher and an ensuing quarrel. Tempers rose to fever pitch and the sweep threw his soot at the whitewasher who, quick to retaliate, hurled the contents of his pail over his tormentor.

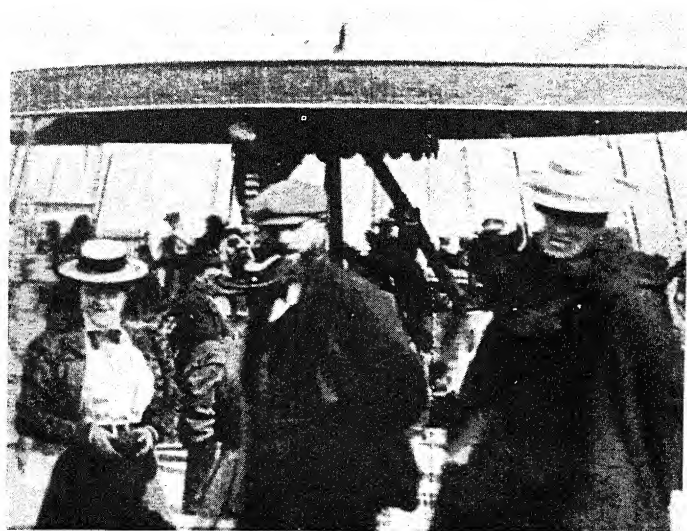
The film was brought to a fitting close by a woman opening the cottage door and coming out and looking first at the whitewash-covered sweep and the soot-covered whitewasher and expressing her dismay directly at the lens of the camera.

The whole thing lasted only half a minute, but, in those thirty seconds, slapstick was given to a long-suffering and unsuspecting world.

Other films led to complications with the public. In one picture a convict escaped from a train at Highgate



"DOG VERSUS PIPE," A TYPICAL COMEDY OF 1900
REPRODUCED FROM AN ACTUAL CUTTING OF THE FILM



BRIGHTON IN 1896
REPRODUCED FROM A CONTEMPORARY "INTEREST" FILM

Station, but the passengers, quite unaware that a film was being made, insisted upon joining in the unfortunate actor's capture with tremendous zest and the scene was ruined. Robbing a blind man of his pennies caused another of 'Daddy' Paul's actors (who were also assistants in his workshop) an uncomfortable five minutes. Passers-by who chanced to see the underhand work gave vent to their feelings in no uncertain manner, with the result that the 'thief' was unable to sit down for many days after!

It was not long before Paul realised the necessity of introducing interior scenes. Had you chanced to be in Leicester Square one fine day in the late nineties and happened to glance up to the roof of the Alhambra, you would have seen the man who, nightly, provided the Living Pictures in the theatre's variety programme, directing Britain's first drawing-room comedy. Stage scenery and props were hauled from the scene dock up to the roof and made fast against the wind. Called "The Soldier's Courtship," it certainly possessed a sex-appeal title, but it contained nothing to shock the worthy Victorians. Two amorous soldiers wooed a fickle nurse-maid and, following the tradition of the day which demanded that every inch of film should contain strenuous action, they soon came to blows. In the mêlée which ensued the nurse-maid's charge was spilled out of its crib and, at the psychological moment, the mistress of the house arrived home. Snatching up her child, she scolded the girl, soothed the baby and boxed the ears of the culprits, a transition which must have been hot going in the few seconds available.

The hauling of the theatre scenery to the roof proved irksome and inconvenient, so Paul decided to erect a building specially designed for the production of photo-plays. The word 'studio' had yet to come into vogue; in fact, there was no preconceived idea of the form such a building should take. Edison had solved the problem with the tarred-paper 'Black Maria.' Paul found the solution in a glass-roofed building which, while affording protection from rain and wind, would also admit all the daylight available.

By this time his film business had increased enormously. His contract with the Alhambra music-hall had been for a fortnight's show, but it ultimately extended to four years, Paul personally superintending the projection every night for three years. Sir Augustus Harris, the famous Drury Lane impresario, prompted by his wife's enthusiasm for the 'moving photographs,' had made Paul a business proposition. "The show won't draw for more than a month, the public soon get tired of these novelties," he pointed out. "Would you be prepared to put the show on at the Olympia on sharing terms—you to receive fifty per cent of the receipts?" Paul consented and the moving pictures ultimately ran on month after month at Olympia, the only similar show having been that at The Polytechnic, Regent Street, where a French cinematograph, the Lumière, was presented on February 20th, 1896.

Very soon, eight music-halls were showing Paul's films, which necessitated a twenty-mile journey every night for their creator, so great were the difficulties in training operators to handle the projectors. When men

could be found to undertake the work they earned £4 a week, a scale which many provincial cinema operators of to-day would be glad to put in their pockets every Friday night.

Film history, too, was duplicating itself in other film capitals of the world. In France films had been shown publicly for the first time on December 25th, 1895, at the Grand Café, Boulevard de Madeleine, Paris, by the Brothers Lumière.

Berlin, too, had an exhibition of 'pictures which moved.' Only the other day the German film trade honoured seventy-two-year-old Max Skladanowsky, one of the pioneers of its film industry, and during the evening some films which he made in that far-off past were shown. They had been carefully preserved ever since their successful run at the Winter Garden, Berlin, in 1895. One of them, a picture taken in the Alexanderplatz, was the first film to be screened to a specially-composed musical accompaniment—thus was the modern film, "Berlin," anticipated by at least thirty years.

Things were humming in the film world in the nineties, and no mistake. Robert W. Paul's plans for his studio were far advanced. There was no cloud on the horizon. Then, suddenly and without warning, a thunderbolt fell which struck at the very foundations of the thriving but still young industry.

Swiftly and ruthlessly it threatened to wipe out the creative work of the pioneer inventors and destroy every vestige of the cinema, laying waste the whole field, as though the movie had never been.

CHAPTER FOUR

THE setting for the next stage in the drama is Paris in the gay nineties. Rich and poor alike are agog with excitement over a grand charity bazaar which the most aristocratic families are to attend, including Duchesse d'Alençon, sister of the Empress of Austria.

Everyone is thronging into the Rue Jean Goujon where, on a site lent by Madame Henri Heine, has been erected a street representing Old Paris.

What connection can there possibly be between this colourful scene and the disaster which almost spelt the end of the moving pictures?

The link is a hall, built of old pine-wood, in which a cinematograph exhibition is providing the last word in up-to-date side-shows. The hall is packed with interested spectators all agog at the latest marvel of the age. The projector is quite unlike the modern apparatus; there is no take-up spool to accommodate the film as it comes through the machine; instead it simply falls into a velvet bag. Neither is there any fire-proof device to prevent the film igniting. In place of the arc light of to-day the illuminant in use is mixed with ether, the highly volatile nature of which is an added source of danger. Remember, too, that the film itself is of celluloid, a composition of camphor and gun-cotton. It had long been realised that there was danger

of the film catching fire and all kinds of crude expedients had been resorted to to minimise the risk, one of the most curious being a flask of water in which a few drops of acetic acid were dropped. This was placed between the illuminant and the film to act as a heat absorber, and, when it was noticed that the water was apt to boil, a piece of coke on a bent wire was introduced into the top of the flask to prevent bubbles marring the picture on the screen! Another safety-first device then in use was an ordinary lavatory cistern poised over the film; in case of fire the operator simply pulled the chain!

So far as can be ascertained, the lantern at the Old Paris bazaar did not even boast elementary safety devices of this kind.

Suddenly the film burst into flames; a livid pillar of fire shot upwards and those seated close at hand shrieked in terror. Without warning, the pleasure-seekers were faced with tragedy stark and terrible.

The hall was instantly ablaze from end to end. The old pine-wood quickly ignited and soon the whole place was a livid hell. Panic-stricken women fought for the exits without avail. Desperate efforts were made by those outside to rescue those within from their plight, but, so intense was the fire, the would-be helpers could do nothing. One woman, the Duchesse d'Alençon, remained calm, doing all she could to succour those demented with fear around her. So, refusing to save herself, she was one of the first to perish.

The death-roll totalled one hundred and thirty, most of whom were women.

That night all Paris mourned the victims of the terrible tragedy. The following day the city went into general mourning, every theatre and place of entertainment being closed, and there was a State Requiem Mass at Notre-Dame.

The whole world stood appalled at the disaster. It was one of the blackest of all black pages in the history of catastrophes, and the Press, which had formerly all but ignored the new invention as a passing stunt, now loosened its tongue and poured venom upon it. Column after column denounced the dangers of the films, and page after page shrieked the pitiless details of the tragedy and never failed to point the moral—"The Living Pictures must go."

The men who made the movies had no lay Press or pulpit; every man's hand was against them and they had no means of defending their prodigy. It looked as though the film must indeed die.

Try as they might, there was no spectacular way of winning back public favour or wiping out the past. Yet they believed in the future, believed that the cinema could be made safe, that there would eventually be wider horizons for the film if only they set their teeth and went relentlessly on.

Again and again in the chequered story of the cinema, the leaders have had to do that, answering prejudice and abuse by setting their minds on the future and forgetting the persecutors of the present.

And so the cinema went on, but for many long years it was ignored by the Press; on the rare occasions when it was mentioned, its name was coupled with a sneer.

Safety devices were introduced. The film men had learned their lesson and, though authorities imposed all kinds of irksome restrictions and regulations, cinematographers readily agreed to play their part in seeing that they were carried out. Though there have been other tragedies, they grow happily rarer, and to-day the cinema is as safe as human ingenuity can make it and a great deal safer than scores of other forms of entertainment and recreation.

With the shadow of the Paris tragedy hanging over them, the pioneers found public interest waning. It was becoming increasingly difficult to lure people into a hall, which they imagined to be fraught with every kind of danger, merely to see workmen leaving a factory at the dinner-hour or the arrival of a train at a railway station. Something clearly had to be done over and above reassuring the public on the score of safety.

The truth was that the film could no longer be regarded as a novelty. It must enter on something approaching an equitable level with other forms of entertainment if it was to hold its own. It was hard to find some fresh angle, but remembering that little incidents in which men had been frightened by ghosts and soldiers had interrupted one another's courtships had proved popular, attention was once more focused on films in which characters enacted imaginary episodes.

It was left to the Edison company to take the plunge and provide something in the nature of an acted drama. Shakespeare had already been seen on the screen, Vitagraph making versions of "Othello" and "Romeo

and Juliet," but they were purely episodic and pageant-like. The Edison experiment took the form of a playlet in which a fireman attending a conflagration rescued the daughter of the Chief of the Fire Brigade and was acclaimed a popular hero, the whole ending with the promise of a romance between the two leading characters. It was called "The Life of an American Fireman" and ran to the hitherto unheard-of length of four hundred feet.

Its success, though not overwhelming, was sufficiently encouraging to prompt its sponsors to a further effort, and they followed it with "The Arrest of the Yeg Bank Robbers," into which an element of suspense was again introduced, with favourable results at the box office. About this time, too, a film was made of the stage play "The Broken Melody," with Van Biele, the celebrated 'cellist, and his wife enacting the principal roles. An attempt was even made to have Van Biele, seated in the orchestra, synchronise his playing with that depicted on the film, but this was unsuccessful. But the production is worthy of more than ordinary note, because it marks the first occasion on which a 'modern' stage play was filmed.

It was now "sink or swim" for the cinema, and Edison plunged in head first with "The Great Train Robbery," into which they put everything they knew.

There are still people who remember "The Great Train Robbery"; they speak of it as successive generations of cinema-goers speak of "Barnaby Rudge," "The Birth of a Nation," "Ben Hur," and "The Singing Fool," for it marked a turning-point, but in the case of

"The Great Train Robbery" it was not merely a new phase in cinematic ideas but the very line of demarcation between failure and success.

"The Great Train Robbery" cost approximately £100 to produce. In its heyday it must have netted hundreds of thousands of pounds for showmen the world over, for it was projected continuously over a period of years and it brought the producers alone a return of more than twenty thousand pounds!

This, in brief, was the story of the film:—

A lonely railway telegraph operator is surprised by a couple of bandits who, at the point of a revolver, order him to hold up a train. Boarding the express, the bandits climb over the roofs of the carriages and spring upon the unsuspecting driver and fireman. The train is pillaged from end to end and one passenger, endeavouring to escape, is shot. Meanwhile, the operator has managed to send for help and the sheriff in the near-by town calls his posse together. Riding swiftly, they are in time to drop upon the bandits before they have a chance to get away. One of their number attempts to escape, but is shot down by one of the sheriff's men.

From this brief description it will be seen that it contained all the essentials of film construction as we know it to-day—the flash-back, parallel action and many more examples of what is now everyday technique.

The film was eight hundred feet in length and bore

no sub-titles to explain the action, but introduced double photography in the shape of a train passing outside the telegraph cabin, the cabin being a studio scene and the passing train another picture superimposed on the negative.

Behind the film itself was a story equally as interesting as that portrayed in the photographed action. The film marked the début of a music-hall artist called, variously, G. M. Anderson and Max Aronson. There is an apocryphal story that, though he had enacted cowboy roles on the stage, he had never actually sat a horse, and when he discovered that he was expected to ride one in the film he insisted upon the producer obtaining the most docile animal the local livery stables could provide! In the film, too, he had to be shot down, which entailed falling heavily from the horse, a piece of realism which he is said to have performed only after assurances that he wouldn't be asked to do it again. G. M. Anderson subsequently became one of the most daring cowboy characters the screen has ever known, and at one period in the history of the cinema his popularity was unbounded, but that was after he assumed for professional purposes the name by which his screen counterpart was known to every small boy who could rake up threepence for a stolen afternoon 'at the pictures.' G. M. Anderson was "Broncho Billy," the first of the cowboy stars.

With a partner named George K. Spoor he formed a company of his own, which they called Essanay, the 'S' and 'A' being their respective initials. During its glorious but not overlong span of life, the Essanay



G. M. ANDERSON, BETTER KNOWN AS "BRONCHO BILLY" (IN FOREGROUND) WHO MADE HIS DEBUT IN EDISON'S "GREAT TRAIN ROBBERY"



SHOP SHOW CINEMA IN OLD KENT ROAD

company, with its studios on Argyle Street, Chicago, employed Charles Chaplin, Gloria Swanson, and Wallace Beery and many more stars whose names are familiar to every cinema-goer to-day. The old studio saw many happy, care-free days. Wallace Beery, fresh from his life as elephant-keeper to a circus, blossomed out there as a female impersonator, making a series of comedies under the title of "Sweedie the Housemaid," in which he portrayed a lugubrious foreign servant girl. He had a high-powered roadster and was in constant trouble with the police because of alleged breaches of the speeding laws, and his sudden appearance in Hollywood was not, perhaps, unconnected with the fact that his driving was being looked upon in no uncertain light by the police officers of Chicago.

Broncho Billy would sometimes make a brief appearance in a Chaplin comedy as a spectator at a boxing match or in some similar minor role, while Chaplin once obliged Broncho Billy by playing a 'bit' as a hilarious reveller in a saloon scene in one of his starring vehicles, "His Regeneration." This led to a curious state of affairs; unscrupulous exhibitors would advertise such films as 'featuring Charles Chaplin,' whereas the picture-goer was treated to only a very brief glimpse of the great comedian among a score of extras in the background. Needless to say, audiences resented this ramp and the practice was immediately discontinued when the innocent stars found out what the showmen were doing. But several years later Chaplin did make a similar brief appearance in a film without his name being mentioned; in "The Woman in Paris," which he

directed, he appeared for a few seconds as a French railway porter in a railway station scene, simply coming out of a luggage room and dumping down a trunk as prelude to Edna Purviance's appearance.

To return to "The Great Train Robbery," the actors found that movie-making on a Sunday was not all honey. As their day's work was nearing completion they were accosted by an officer of the law, who placed them under arrest and thrust them into the lock-up for the night, where they were left to speculate as to their 'crime.' In the morning they discovered the nature of the charge; they had been guilty of desecrating the Sabbath by letting off a gun!

Harold Lloyd—then, of course, a very small boy—was one of those who revelled in "The Great Train Robbery." He once said, "The first picture I ever saw was 'The Great Train Robbery'—and it is no great feat of memory to recall it. It was the first plot ever filmed, and the scene where the masked bandit crawled over the coal-tender and stuck the revolver into the face of the engineer is as clear as if I had seen it last week."

The success attending this early epic of banditry aroused considerable interest on the part of enterprising music-hall managers, who saw in it a top-of-the-bill attraction. Consequently, the film found its way into the programmes of thousands of music-halls the world over and for some considerable time The Bioscope, as it was called, had a regular place in variety programmes. But it gradually declined from top to bottom and during later years the film was used to play the audience out. In fact, so few of the audience remained

to see the film at many houses that, though the words 'The Bioscope' were printed immediately above 'The King,' the managers never even bothered to show the film at all and, in nine cases out of ten, there wasn't one on the premises.

The reason for this gradual decline was not due to waning interest or the poor quality of the productions then available, but films had gradually lengthened from single reels or half reels to multiple reel efforts, and managers could not afford to give more than a few minutes to a 'number' of this type. The London Coliseum retained The Bioscope as a turn right up to the time variety gave place to other attractions, but the film shown invariably took the form of a news reel which, of course, took only a few minutes to project.

In America, when films were in their heyday as a star attraction on variety bills, they were actually allotted fifteen minutes, the standard time allowed to an act of the first rank. Therefore a reel of cinematograph film was one thousand feet in length, a thousand feet in those days taking fifteen minutes to show. From then on, one thousand feet became the standard length for a reel, and though pictures no longer form an item in variety programmes, the standard length of a reel of film is still one thousand feet to this very day. Feature length productions lasting an hour or more are made up of seven or more reels of one thousand feet each.

The music-hall 'bioscopes' have a little history all their own. Before the cinematograph acts were passed making it compulsory to enclose the projectors in compartments to which the public could not gain access,

operators experienced adventures which make strange reading in these days when their activities are unseen and almost unthought of by the thousands of people 'in front' who watch the talkies. At one London music-hall the projector was clamped to the front rail of the gallery. The operator was busily cranking the handle and keenly watching the progress of the picture on the screen when he felt a slight tap on his shoulder; behind him in the darkness stood a very perplexed young man. "I say," he whispered urgently, "I don't know if it makes any difference to you, but that film you've got there is coming down on top of me and running all over the floor."

"Good Heavens!" gasped the astonished projectionist, "where are you sitting?"

"In the stalls," the other answered. The operator looked at his machine and took in the situation at a glance; the film had failed to wind up on the take-up spool and had cascaded down to the floor of the theatre below. Yards and yards of film were writhing all over the floor, where half a dozen people in near-by seats were calmly smoking and enjoying the show. Grasping the film in both hands the operator hauled it up hand over hand to safety—but the audience never saw the rest of the film!

In another case a travelling showman was giving a performance in a provincial music-hall, to the evident delight of countless yokels who had come in from outlying villages especially to see the pictures. Suddenly he was accosted by a youth who, without preamble, demanded—"Make I come on t' pictures."

"How do you mean?" protested the showman.

"Just what I tell 'ee—make I come on t' moving pictures. I want to see I on that there sheet."

The exhibitor expostulated, explained and pleaded, but it was all in vain. Hodge still reiterated, "Make I come on t' moving pictures."

"Oh, go away and sit down," said the showman at last, quite out of patience. As he turned to give his attention to the projector, Hodge gave him 'a lug on t' jaw,' and the whole thing had to be settled at the police court the following morning!

In a London suburban hall, a travelling showman—one whose name is now familiar to thousands of cinema-goers in this country—had hit upon the plan of taking the audience behind the scenes, as it were, and between each picture, mounted the stage and gave a short discourse on the marvels of cinematography and how they were achieved. He had got well into his stride after the first film and was enlarging on the wonders of the next picture when he heard an ominous clanking noise from the direction of his beloved apparatus.

He halted for a moment, nonplussed, then, reassuring himself that everything must be all right, as he had left the machine in charge of an assistant, he continued with his lecture. But it was no use, the louder he talked the more reverberating the crashes from the other end of the theatre. Losing his nerve, he leapt from the platform and raced up the gangway. His beloved projector was scattered to pieces on the floor.

"What on earth has happened?" he shouted at his luckless assistant, while the audience grinned.

"It's like this 'ere, sir," the boy explained, "the blarm thing's melted." It was only too true. The projector was of cheap and shoddy make and its components had been soldered together and the heat from the limelight had disintegrated the entire machine.

One of the earliest, if not the earliest, music-halls in the provinces to introduce films into its programmes was The Argyle, Birkenhead.

The manager, Mr. D. J. Clarke, had heard of the cinematograph's success as a London music-hall attraction and was determined to obtain the novelty for his theatre. Accordingly he journeyed to London and eventually tracked down a Frenchman who had a machine, but only three films (one of which, famous in its day, depicted a man eating rats!).

As only the Frenchman knew how to make the machine work, he was hired with it to give the show. He was billed as "The Wonder Worker," though he did nothing more miraculous than thread the films and turn the handle.

As the Argyle theatre did not then boast an electricity supply, a cable had to be laid down the streets in the gutter from the power station to the music-hall.

The opening night show was such a huge success that the audience refused to depart until the films had been rewound and shown over again.

Next day Mr. Clarke had to go to Liverpool on business. In the forenoon he was tracked down by a Birkenhead constable, who exclaimed—"You must come back at once, Mr. Clarke, or they'll wreck your theatre."

Though it was early afternoon and the theatre was not due to open until 8.30, the police had to force a passage from the Ferry to the theatre, so dense was the crowd of people clamouring to see the show. As soon as the manager put his key in the door the crowd brushed him aside like a straw and rapidly filled the theatre, no one paying for admission.

Someone started a spontaneous hat-passing in the audience and the management realised, in many cases, more for a seat than would have been paid for it in the ordinary way.

So great was the attraction—this despite the fact that, to make it transparent, the screen had to be kept sopping wet and dripped on the patrons in the front row—the Argyle's three films ran continuously for nine months.

Thirty years ago the film could boast no home of its own. Its position in the music-hall bill, as we have seen, was only a temporary haven. For the rest its domicile was the fair-ground and the assembly rooms, at both of which it stayed only a night or two before moving on.

About this time several enterprising showmen set out equipped with vans and tents and gave one-night shows on village greens and in schoolrooms and parish halls. Many notabilities of the vast cinema industry of to-day started life with a projector, half a dozen short film subjects and a horse van.

The movies' first permanent residence was in a building as unlike the popular conception of a cinema as can be imagined.

One morning passers-by in Oxford Street noticed that number 165 had been taken over by a firm describing itself as 'Hale's Tours.' Enticing bills announced that one could take a Trip Through the Rocky Mountains for 6d. or a Sight-seeing Tour of Wales for like amount. The offer seemed to be too good to be true, but the curious persons who found their way inside the strange-looking premises were amply rewarded for their enterprise.

They found themselves seated in a saloon railway carriage of American construction. When it was full a conductor came along and collected the 'fares.' Then he pulled a cord and a bell clanged. Immediately there was a grinding of wheels and the hiss of escaping steam and the car began to lurch from side to side. The lights gradually went out and at the far end of the car, built as an observation platform, scenes in the Rockies suddenly appeared, railway lines stretching out before the spectator, sleepers and rails rapidly speeding towards him. At signals and crossings a railway whistle shrieked its warning. When stations were reached the car gradually ceased its rocking and the wheels their beating until, at another warning clang from the bell, the train once more proceeded on its way. Bridges, tunnels, ravines—all sped realistically towards the spectator. When rivers and waterfalls were passed the surroundings took on a greenish hue, or if a forest fire were encountered by the way the whole scene was bathed in red.

Then the travellers suddenly found they had reached their destination and the conductor was calling "All

change." Blinking and stumbling they left the car to find themselves once again in prosaic Oxford Street, with its crowd of shoppers, jingling hansoms and horse buses.

As the reader will have guessed, the observation car was a realistic counterfeit of the real thing mounted on rockers operated by unseen men. The view which appeared to be speeding towards the passenger was a cinematograph film which had been taken on a camera lashed to the front of a locomotive, and which was projected from behind a screen at the end of the car. The hissing steam and beating wheels were merely clever effects worked by unseen assistants. The colour effects were created by concealed electric bulbs round the screen; their introduction, perhaps, was the only false note, but it is recorded here because they marked yet another step in the story of the movies, being the first occasion on which a screen was colour-lit, a practice which is in vogue at nearly all cinemas to-day, when the main titles of the big pictures are projected.

Over a thousand people a day paid to ride on Hale's make-believe train in Oxford Street and in dozens of big cities in Europe and the United States the same thing was taking place. One of the earliest visitors to the new wonder was a little boy who tightly clutched his father's hand when the car heeled over at the curves. The whole thing was too overwhelming for one who did not know that the illusion of travelling at a high speed in an American observation car was only the latest development in moving pictures. In later years he was to become much better acquainted with the marvels of

the movies, for his name was Ronald Colman.

Though Hale's Tours were an undoubted success, and though the fit-up shows on fairgrounds and in village halls and assembly rooms were well patronised, the movies were being banished by the music-halls.

The moving picture was rapidly becoming homeless—seeking a night's lodging here, begging a roof for its head there—with nowhere to turn for permanent shelter. Unless it was to die from *want* of exposure, the movie must build itself a home. The problem was how to do it. What form should it take?

With the first glimmerings that a permanent home was essential if the movies were to have room in which to develop, a name began to take shape—'The Electric Theatre.'

Magic phrase! It conjured up romantic possibilities of startling mechanical delights of illusion and entertainment. But before its realisation in glaring electric bulbs over fretwork facias, there was more disappointment and strife in store for those who had pinned their faith to 'the pictures.'

CHAPTER FIVE

THE cinema had actually already had one home (Olympia must be disqualified on the ground that it was—as it still is—a hall where exhibitions of all kinds are held).

It was in June, 1896, that the very first cinema theatre proper opened its doors in Fife Road, Kingston-on-Thames.

The man responsible for the enterprise was a Mr. Lane, who made this, his first, excursion into cinema managership through getting into touch with two young men who had just come from America and who brought with them a projector they had bought in Coney Island.

At first the trio had some difficulty in mastering the intricacies of the machine. Lane, who was living with his parents, invited his friends round to try the apparatus out in his home. It was not long before the whole place was filled with the obnoxious fumes of carbon gas, so, without more ado, Lane's mother bundled the three of them and their machine out into the garden.

After evenings spent in experiment they managed to get the machine going, but it was one thing to master the machine and quite another to decide how best to realise on their investment. There was no hall available for their project, so they decided to rent any vacant

premises that appeared suitable for the purpose. They soon hit upon an empty shop in Fife Road and unfolded their plan to the landlord.

It took a lot of explaining and when he did grasp their proposal he did not hesitate to tell them that he thought they were mad. Hardly had they reassured him on this score when he became fearful for the safety of his shop.

However, a bargain was struck and Lane and his companions moved in and installed the projector. So much light came in through the plate-glass window that it was impossible to see the picture on the screen. They overcame this difficulty by pasting sheets of brown paper over the glass. This gave the shop the depressing air of being empty and passers-by paid no heed to the marvellous show that was on view. Discouraged, the three partners held a consultation and decided that the only thing to do was to stand outside on the pavement and call attention to the entertainment by sheer lung power.

A few people availed themselves of the invitation, but the whole scheme was too premature. The public was not movie-minded and continued on its way unheeding. Finally, so poor was the response, the show was closed.

A year later, in 1897, a successful shop show was opened in Upper Street, Islington, at an all-round admission charge of 2d., for which the audience was provided with a ten-minute programme. While the people within enjoyed the show a crowd was encouraged to assemble outside, all agog to enter as soon as

those inside came out. In this way performances were practically continuous.

One young man who passed the show was so impressed by the splendid business being done that he purchased an outfit from the proprietor and went down to Brighton and rented a shop on the promenade opposite the West Pier. Incautiously, he mentioned his project to some friends in the town and they advised him to make his admission charge 6d.

Brighton's first cinema opened on Whit-Monday, 1897, but for all Brighton cared, it might not have bothered to open its doors at all. Only a handful of people could be induced to come in and pay sixpence to witness the marvel. The takings fell steadily until they reached the low-water mark of 15s. a day, when the sadder but wiser proprietor decided to close down.

Such enterprises, however ill-fated they may have seemed to their promoters, were not without their place in the development of the cinema as a popular amusement. Showmen were convinced that despite public apathy there was nothing wrong with the show. What they had to contend with was ignorance. The public was simply unaware of the nature of the entertainment offered. The term 'Animated Pictures' did not hold sufficient allure. Several of the hardier spirits persevered, and the 'barker,' borrowed from the fairground and circus, became an integral part of the early picture shows. His duties were to extol the wonders of the show, attract attention by whacking the billboards with a penny swagger cane and explain the nature of the entertainment as best he could. His descendants are,

of course, the immaculate commissionaires who strut before the super-cinemas of to-day.

Then—stroke of genius!—some unknown showman coined the phrase ‘Electric Theatre’ to describe the show. The draughty shops and railway arches which housed these shows were of course in no sense ‘theatres,’ but the word indicated the theatrical nature of the entertainment. Neither had electricity much bearing on the subject, but ‘Electric Theatre’ was curiosity-arousing and that was what the movies badly needed.

Before the century was out the converted shop had become the home of the despised flickers. The projector was usually placed in the window and pointed to the far end of the shop, on the end wall of which a sheet was stretched, the window itself being pasted up with bills advertising the show. The seating arrangements consisted of any odd chairs or forms the proprietor could lay hands on, or, when these were not available, up-ended boxes did duty as seats. There was no pay-box, a dingy curtain being the only barrier between the pavement and the auditorium. There were no fixed times for the performances; only when, by the ‘barker’s’ endeavours, the show was full would the films be shown. The admission charge was anything from a penny to threepence, according to the quality of the show or the wealth and gullibility of the neighbourhood. There was no differentiation between front and back seats. Before the programme began, a man would go round with an empty tin or cigar-box and collect the money, and if the collector were not the actual proprietor of the show, a good number of pennies usually

found their way into his pockets instead of the box. It was not unusual to hear the proprietor admonishing: "Didn't 'ear the chink of that one going into the box, Albert!" Whereat Albert would look suitably aggrieved and take care to give the collecting-box a rattle next time he concealed a penny in his palm.

I remember one such show at Hackney that was housed in an unusually long shop. The projector was quite unable to 'throw' the picture the whole length of the premises, so the astute proprietor suspended the sheet half-way down the hall. By constantly spraying the latter with oil, it was rendered sufficiently transparent to enable persons sitting behind it, as well as in front, to see the picture. For the front half of the auditorium a penny was charged, and for the rear a halfpenny, this reduction being in the nature of compensation for seeing the pictures reversed! Imagine, then, a hall in which the audience was divided in halves, each facing the other and with only a thin sheet intervening, and with those in the rear portion unable to read the reversed explanatory matter shown on the screen. When the hero wrote a note to the heroine, those seated behind the sheet were unable to read it and set up a clamour for those on the opposite side to tell them what it was about, whereupon all those seated in front would chant with one voice: "Dear Agnes, meet me at the railroad depot at three.—Jack."

This was all very well up to a point, but when the action on the screen became particularly exciting, the audience sitting in front could not be bothered to help out their less wealthy neighbours at the other end.

Consequently the 'halfpenny patrons' would give vent to their annoyance by uncomplimentary remarks, booing, stamping, and other signs of displeasure. Finally an emissary would crawl stealthily over the line of demarcation to take a peep at the screen from the 'right' side and report, until such time as he was discovered by the proprietor and chivvied back into the halfpenny fold.

This humble hall must surely have been the birth-place of the obnoxious practice of reading sub-titles aloud.

In Soho, in 1908, there was a film-cleaning plant run by a Frenchman. In connection with the factory was a cinema—open to the public, of course—which was actually a converted stable. It had no floor, other than the original cobbles, and the screen was erected over the manger, some of the horse stalls still being there.

At this cinema, incidentally, Eugene Lauste was working, the man who, as we shall see later, was really responsible for the invention of the talkies.

The usual accompaniment to films at this period was a noisy barrel-organ, which vied with the bellowing 'barker' outside for supremacy and more or less drowned the din made by the projector.

In Whitechapel, one of the early shows originated the practice of admitting children at half price. The proprietor would easily fill the shop with children at a halfpenny a head, but if a sudden influx of adults at a penny presented itself, he would clear the children from the halfpenny seats and install the adults instead, the kiddies being led to the cellar under the shop, where

they were left to amuse themselves as best they could. Not infrequently a soul-searing drama of love and passion would be rudely shattered by a terrific uproar from the lower regions. The proprietor would open the door and call for order, but if this was not forthcoming—and it usually was not—the ‘barker’ would be sent for from the front of the shop and would go below and restore peace and quiet (of a kind) by some quick by-play with his swagger cane.

They were bad old days, I suppose, but there was something about the early shop shows which the great super-cinemas of to-day never can recapture—a glorious sense of adventure, of voyaging into the unknown, for in those days, for a penny, you could experience with the coming of the first American films the same kind of thrill which Columbus must have felt. And if you were a stay-at-home, it was enchanting to come suddenly upon France or Denmark and to be left to discover for yourself what country you had so abruptly entered.

Another early show was “The Moving Pictures” in Bishopsgate, which opened its doors more than thirty years ago. It was situated in the back part of an automatic amusement arcade adjoining Bishopsgate Fire Station. Not long ago I had an interesting talk with Mr. G. Miller, who was one of those engaged in running the show.

“Right back in those early years,” he told me, “we had films which became as popular with our little audiences as the much-boasted super-dramas which feature famous, highly salaried stars to-day. I re-

member there was one called 'The Girl Behind the Counter,' which hailed from Denmark. The opening scenes showed a girl in a glove-shop succumbing to the wiles of 'a polished and attractive nobleman.' The innocent girl was betrayed under promise of marriage by this elegant villain, and, as a result, she was turned out of her home by her white-haired old mother. Deciding to make an end of it all, she made her way wearily to a bridge spanning a river. Just as she was about to leap into the dark waters below, she was rescued by the villain, who, by this time, had repented and now appeared in the guise of an honourable man.

"The whole thing sounds rather silly told like that, but there was something sincere about it and it touched the hearts of our audiences in no uncertain way—and remember that, for the most part, our patrons were rough-and-ready women from the street market in Petticoat Lane. We ran that film night after night until it literally wore out, and many times, when the girl was being driven from home, the sobs of the audience became so loud that I got frightened lest people outside waiting to come in might be deterred, and we had to churn out the very loudest tunes that the barrel-organ boasted.

"Though there were no talkies in those days, we usually gave running commentaries on the films which, owing to the almost entire absence of explanatory matter, were not at all easy to follow. I would stand beside the screen and, giving it an occasional whack with my cane, proclaim such rhetoric as 'The callous scoundrel's heart is now touched with remorse. Will

he repent? Ah, it is too late—see—the innocent, trusting girl, betrayed by the lecherous nobleman, is deciding to take her own life. Alas! there is no one to save her but—wait!—the villain has repented! Will he be in time to save her? Having lured her into worse than death by his honeyed words, he now tries to make amends. Will he be too late? No! No! (this as the girl climbed the parapet). ‘Look! he is running to her side—he has saved her!—he is asking for forgiveness!’ and so it went on. It is laughable to-day, but thirty years ago audiences were not so sophisticated as they are now, and the whole thing was treated in deadly earnest.

“A film called ‘The Riot’ was more popular with the male section of the audience. In it an Irishman entered a tailor’s shop, and after complaining about the way his order had been executed, picked a quarrel with the proprietor. It rapidly spread to half a dozen tailors sitting cross-legged on the floor, and a general mêlée ensued, and everyone started throwing everything within reach. The effect on the audience was startling; when we turned the lights up at the end, we usually found a score of scimmages going on in the hall, each of the combatants hitting his neighbour, their eyes still glued on the screen, quite unaware of what they were doing.

“So popular did the show become that we divided our programme into halves. We would show half a dozen films, few of them more than a hundred feet or so in length, and then, when the performance was over, would tell our patrons that they could stop on and see

a further selection on payment of another penny. One Saturday night we had just made this announcement and collected all the pennies when, on going to the back of the premises to start up the projector, I found the films were on fire! The authorities frowned on such shows as ours in those days, and I dared not go to the fire station next door. Instead, I rushed home—it was only a few hundred yards away—and, sprinting up the stairs three at a time, yelled out to my wife to give me a bath and a blanket. She thought I was crazy, but, realising the urgency of the appeal, she straightway snatched the blanket off our baby's crib and thrust his tin bath on to me. The next moment the Saturday night crowd in Bishopsgate was astonished to see 'Mr. Miller of the Moving Pictures' tearing down the pavement with a blanket under his arm and a bath over his head!

"Though the fire was soon extinguished, we had collected the audience's pennies and, with our programme destroyed, I did not feel like refunding the money if it could be avoided, so, calling a hansom, I went as fast as the horse could take me to Charing Cross Road, where, in Cecil Court (which was the recognised Wardour Street of those days), I bought a fresh supply of films. When I returned I found the audience still quite content, enjoying an impromptu sing-song to the strains of the more popular airs of the barrel-organ. I often wonder what a present-day cinema audience would think if it had to sit and wait while the manager went to Wardour Street to buy a new programme.

"I often wonder, too, what they would say if they were requested by the management to do their bit in

the way of helping to run the show! Yet we invariably picked someone out of the audience, usually a small boy, to help. The illuminant we used entailed a supply of gas, and this was contained in an enormous bag. In order to give it the necessary pressure, someone had to sit on it—hence our request for a boy ‘to come and sit on the gas-bag.’ ”

Many men famous in the industry to-day had their interest in movies first awakened by that invitation. Many more, impressed by the success which attended some of the early shop shows, took the plunge into this virgin field, and in the course of time became millionaires controlling not only chains of theatres, but moving picture studios as well.

Of such were the Warner brothers, who control Warner Brothers’ First National Pictures. Prior to joining the ranks of movie showmen, they ran a boot-shop, a soda-fountain, and sold bicycles on deferred payments.

One of the brothers, Sam, had been many things in turn, including a railway fireman and mechanic at an amusement park. While earning his living in the latter capacity, he first encountered “The Great Train Robbery.” He quickly realised there was money in movies. He discussed the matter with his brothers, and they decided to close down their cycle-shop and open a cinema. Their first venture was a shop show, and held less than one hundred chairs—hired from a neighbouring undertaker. Sam Warner, having a mechanical turn of mind, was the operator, while his brothers Harry and

Jack, the youngest of the four, was general utility man, a role which entailed singing songs to illustrated lantern-slides. In those days a film seldom cost more than £20, but after a programme had been shown in a theatre for a few weeks, audiences began to fall off and the proprietors had to buy a new set of films to entice them back into the theatre. Consequently, as the number of shows increased, neighbouring proprietors hit upon the idea of exchanging their films with each other. It was not long before a new element entered the field, men who saw that there were business possibilities in buying complete programmes and *hiring* them out for a few weeks to the proprietors of the shows. Hire charges, which were low at first, gradually increased as those in charge of the Exchanges, as they were called, realised that they were getting control of the situation. The Warner brothers soon found that they were paying as much to hire a film as they had formerly paid to buy it outright. They therefore sold their theatre and went where the real money was to be made, which was in the ranks of those who distributed films. Such was their entrance into the film business as distributors and, afterwards, producers of films.

But if the Warner Brothers' name is famous to-day, what of Carl Laemmle, of Universal Pictures fame? He was another figure-head of the film industry who broke into pictures in the days when the shop show was in its hey-day.

One of thirteen children born to a poor estate agent in Württemberg, in South Germany, he emigrated to the United States on his seventeenth birthday, borrow-

ing most of the \$22 which it cost for a steerage ticket. He became assistant to a chemist, washing bottles and running errands, and followed this up by becoming a packer in a Chicago warehouse. In those days he walked to work to save tram fares and shared his room and bed with a colleague to save expense. At one period of his colourful life, 'Uncle Carl' (as he is now known throughout the industry) once played a super in "Julius Cæsar," presented by a local repertory company, for which he was paid at the rate of two shillings for each performance. In his 'spare time,' which started at four o'clock in the morning, he was out delivering newspapers from a hand-cart. Finally he entered the clothing business, and made such rapid progress that he decided to become his own master. At the last moment he awoke to the fact that astute men were making money—and big money at that—out of shop cinemas. Taking his courage and his savings in both hands, he plunged into the moving picture business by opening "The White Front," a picture-hall in an empty shop in Milwaukee Avenue, Chicago.

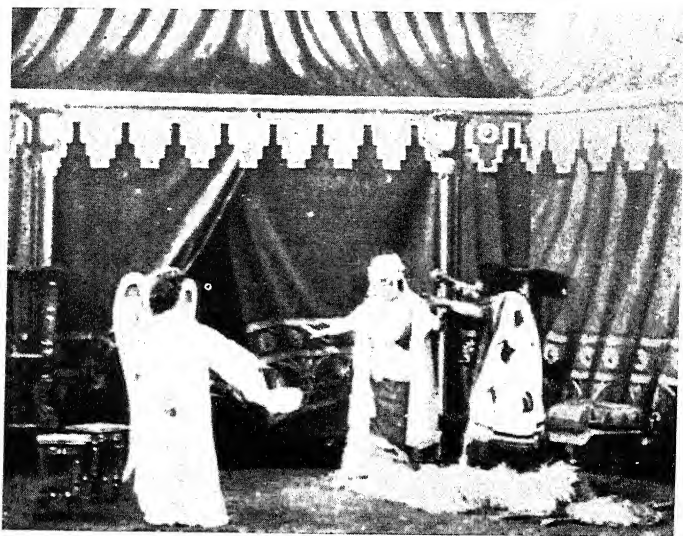
Within two months he had a second theatre, "The Family Theatre." Much white trellis-work and many glowing electric bulbs went to the adornment of these early picture-houses, and Laemmle took particular pains to see that the premises were genteel and clean, and, to this end, slides were projected containing such cautionary warnings as: "Ladies are requested to remove their hats," "Do not spit," "Whistling is forbidden during the illustrated songs," "If you are under the influence of drink, your patronage is not desired."

Like the Warner Brothers, it was not long before Laemmle entered the renting and distributing side of the film business.

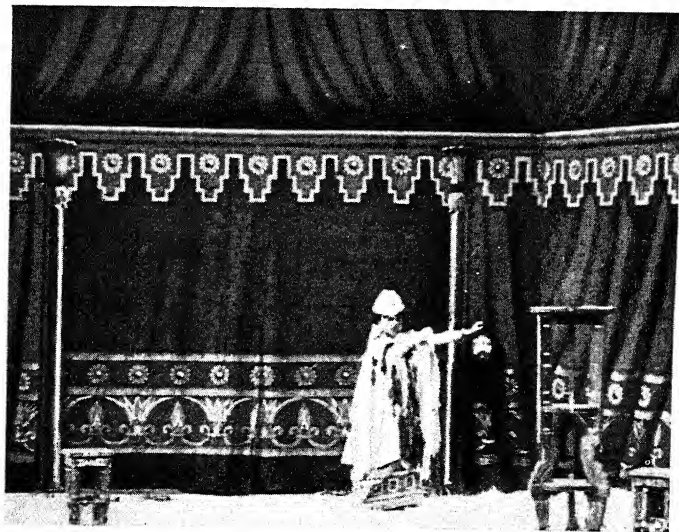
Such stories can be duplicated throughout the early years of the cinema. Take, for instance, Adolph Zukor.

He came to America from his native Hungary when he was sixteen, and took a 10s.-a-week job in a furwarehouse. At night he went to school and learned the language of his country of adoption. Within four years he owned his own shop and was making a profit. One day he was attracted by the big business being done by an automatic arcade just across the way. The centre of attraction was a penny-in-the-slot machine showing moving pictures. Zukor did some quick thinking, and decided that there was more money in films than furs. His first venture was with Marcus Loew. Together they started an amusement arcade, in which the chief attraction was a penny picture machine. It was not long before they branched out and bought a number of shop shows of their own. To-day, Adolph Zukor is head of Paramount Pictures.

Then there is the case of Jesse L. Lasky, who was the first man from the West Coast of America to join the Alaska gold rush and one of the first to reach Nome. He had been a newspaper reporter on a San Francisco paper, and later became the leader of the Royal Hawaiian Band of Honolulu. He was playing the cornet in a New York theatre when he heard the call of the movies, and laid aside his instrument to answer the rattle of the dimes and nickels showering into the pay-boxes of the shop shows—sweeter music than ever came out of



THE ANGEL APPEARS TO JUDITH AND BIDS HER BEHEAD HOLO-
 PHERNE. FROM "JUDITH AND HOLOPHERNE" MADE BY THE CINES
 COMPANY OF ROME, 1906



a cornet—and who, in time, became one of those who did much to raise the general level of film production, first in association with Cecil B. De Mille and Samuel Goldwyn (the latter, incidentally, started life as an apprentice in a glove store) as the Jesse L. Lasky Feature Play Corporation, which, later, in conjunction with Famous Players Film Company, laid the foundations of the Paramount Pictures of to-day.

With their ever-growing success, the shop shows became more and more ambitious. A piano took the place of the barrel-organ; usually it had seen better days—and so had the pianist who played it, but it was a distinct advance. Next the 'barker' was fitted out with a uniform—one which had probably seen years of service in the guards, either military or railway, but it was a step forward, nevertheless. The grimy celluloid collar and beer-stained waistcoat were gone for ever.

Other than the projector light, there was no scope for illumination inside the hall, so the proprietors lavished it on the outside, the fret-work over the entrance being encrusted with innumerable electric bulbs.

The tobacco-tin and cigar-box gave way to an authentic box-office flush with the pavement. The hand-written paper bills were torn down and their place taken by legends in gold leaf—The World Before Your Eyes—Continuous Performance—Ladies and Children Specially Invited—To Elevate, Instruct, and Amuse—and such-like.

Their meaning was not perhaps clear, but the intention which inspired them was impressive.

Hand in hand with these external changes to attract 'bigger and better' audiences, the interiors of the halls began to take on a better aspect. The screen, instead of being a sheet mounted on rollers, became a plaster oblong on the wall embellished by a black border or a band of gold, and sometimes even surrounded by a plush pelmet and side curtains. The pianist, in her corner, was screened by curtains mounted on a brass rail of sufficient girth to make even a publican envious.

The projector, in deference to local bye-laws, was now housed in a little cubicle, so small that 'operating-box' was a term of real significance. It is said, quite seriously, that at one time it was impossible to find any operators more than five feet in height—the men had to fit their boxes.

About this time, too, the proprietors of the shop shows found that their entertainment was different from all other entertainments in more than one respect. The dearest seats (never more than sixpence) were right in front of the screen, thus following the precedent set by the stalls in 'legitimate' theatres. In the first cinemas (following the analogy of the theatre Pit) the cheap seats were at the back. Not unnaturally there were more patrons for the cheap seats, but it took the proprietors quite some time to wake up to the fact that it was not only a matter of £ s. d. which was keeping people out of the stalls. The fact was, seen from close quarters, the flickering pictures were likely to cause eye-strain and bad headaches after only five minutes, whereas, from the back rows, the pictures were far less trying.

It was a simple matter, of course, to transfer the prices and, with this change came another one, the raising of the back rows in order to provide a better view. Properly ramped floors were not to come in for some time, but most of the better-class shows mounted the best seats on box-like steps. Consequently, on pushing one's way through the dusty velvet portières, one was suddenly transported from brilliant sunshine into pitch darkness and confronted with the difficulty of stumbling up three or four steps in the gloom.

Despite all these shortcomings, the shop shows prospered, and soon premises were being properly converted, sites bought and buildings specially erected.

With the discovery of a permanent home, the cinema discovered something which it had as yet hardly realised. It was entertainment—people would pay to see it just as they would pay to see a music-hall programme or a play at the theatre. What is more, they were content with a programme of pictures alone; they demanded no other attractions such as song or dance or patter. It was a surprising discovery and rather a disconcerting one, for, looming like a grim shadow over those early years, was the debacle of the skating-rink craze. Rinks had sprung up overnight, and everyone had gone mad on roller-skating; speculators plunged in only to withdraw badly bitten, for the public, satiated with the thrill of the roller-coasters, had dropped the new craze as quickly as it had taken it up. Consequently, hundreds of skating-rinks stood idle, and with the coming of the boom in movies, hundreds of them had been transformed into picture-halls. Due to

an association of ideas, Jonahs could be heard on every hand predicting the early demise of the new entertainment. "Pictures will never last," they prophesied dolefully. "It will be like the skating-rink craze—all over and forgotten in a year!"

They were wrong, of course, but it is easy to say that now; judge the effect which it had at that time on the men who were pinning their faith in pictures.

Would it last? They asked themselves this riddle morning and night. Though crowds flocked in, there was something uncanny about it; it was almost too good to be true. *Was* it a craze? Would it end as quickly as it had started?

They could only gather in the golden harvest and hope for the best.

Others, concerned with the making and hiring of films, blindly pinned their faith in the ultimate development of the cinema.

In England there was a group of film producers who were the first prospectors in a modern gold rush, not that they knew it.

They had little time to ask themselves that eternal riddle—Will it last?—for they had a far greater problem on hand.

That was, how to tell a story in pictures, how to photograph it, where to photograph it, how it should be acted—in short, how to create it, as it were, out of nothing. Their struggle, carried on at first with little money but with abounding riches in the shape of ideas and enthusiasm, is the next phase of history.

CHAPTER SIX

IF the pioneer days of the cinema hold glamour for you, Newton Avenue, New Southgate, should hold a particular fascination for you if you ever stumble among the brickbats of what is still an unmade road, dotted with villas of a bygone era and building lots sprinkled with old boots and tins. For it is little changed since the days when 'Newton Avenue Works, Newton Avenue,' was the address of Robert W. Paul's plant—the first motion picture studio ever erected in this country.

For many years the early technique of the movies first saw the light in the curiously styled 'Newton Avenue Works.' People whose names have become famous in many walks of film life made their débuts in this little greenhouse studio in a field.

The New Southgate Studio was totally dissimilar to Edison's "Black Maria." In design it followed the traditional portrait photographer's studio of its day, but with a strange admixture of theatre.

It took the form of a glass-house, fifteen feet wide and ten feet deep. It stood twelve feet in height, but this did not represent actual head room for the actors, for its floor was raised four or five feet from the ground to enable players to fall through a trap-door. It clung, moreover, to the stage tradition, inasmuch as it was fitted with wings and top borders. The scenery used

was painted in perspective in the theatrical manner of the day with doors and windows daubed on the back-cloth. Access to the 'floor' of the studio was gained by climbing a ladder.

The restricted floor space not affording sufficient camera range, that instrument was placed on a separate platform outside the studio. This camera-stand was also four or five feet in height, to bring it on the same level as the stage. It was mounted on wheels and ran on a short length of railway-track down to the open doors of the little glass-house. This was probably the world's first camera truck, and would have permitted moving camera shots, or dolly shots, as they are called to-day, to be made, but moving the camera in towards a scene while it was being enacted was a piece of technique that had not been thought of in those days.

The studio, being lighted entirely by daylight, could not be used before sunrise or after sunset.

Attached to this queer 'stage on stilts' was the printing and developing plant. It sounds like an extract from the annals of a suicide club, but it is nevertheless a fact that the films were printed by the light of 'fish-tail' gas-jets!

One or two single-reel films were turned out with clockwork regularity from this tiny plant every week, and Paul soon gained a reputation for clever trick effects. A scene would be shot in the ordinary way, the characters appearing life-size, the back of the stage would then be draped with a black cloth, the camera moved back twenty or thirty feet on its rails, the film wound back in the camera and a lens of suitable focus

inserted in the mount, then another piece of action would be shot, the result of the superimposition being tiny human phantoms apparently mixing with solid people of ordinary proportions. One such film bore the snappy title (nearly as long as the picture itself), "The Cheesemites, or Lilliputians in a London Restaurant," and depicted a sailor's understandable astonishment on beholding tiny dwarfs climbing out of the piece of cheese he was about to eat. But levity was not always the keynote of Robert Paul's productions, as witness "Ora Pro Nobis," in which a dying waif crept among pasteboard tombstones before a back cloth representing a church, a back cloth more ambitious than most, for it had transparencies representing stained-glass windows. As a heavy snowstorm began, the waif breathed her last, and knew this vale of tears no more. The clergy coming out of the church were alarmed to discover the little one dead in a cotton-wool snow-drift. An angel descended from Heaven, clasped the waif to its bosom and bore it skywards through the falling snow.

It was in such pictures as these that Britain's first professional film actor made his début. His name was Johnny Butt, and he made his first appearance before Paul's camera as a bear in one of these early trick films and was paid 5s. for his work. He was comedian of no mean ability, and earned as much as £10 a day in later pictures, and was for many years a member of the Hepworth Stock Company. Many people in the industry regarded him as a mascot, and Manning Haynes, Jack Raymond and other directors are said to

have refused to make a picture unless he was in the cast. He died in June, 1931, his last pictures being "Blackmail" and "The Informer."

Paul's studio soon had several rivals, the earliest being a similar kind of glass-house opened by Williamson at Hove. Mr. Williamson was a chemist, and, as photography became popular, supplied the growing army of amateurs with cameras and accessories. Having started several businesses of this sort in Brighton, he turned his attention to moving pictures and converted a Wrench projector into a camera—no mean feat even in 1897, when apparatus was not so complicated as it is now. One of his initial experiments was a topical of the Grand National of 1898, but, owing to the race being run in a snowstorm, the result left a lot to be desired. His first success was a film of the Queen Victoria Jubilee procession.

In his glass-topped studio he made scores of successful pictures. It still stands to-day alongside the railway between Brighton and Hove, though it has ceased to echo to the whirr of cinematograph cameras; it is now a furniture store, but on the wall adjoining the railway the curious may still decipher the letters "Kinema-colour," memorial to a later phase in Britain's cinema history, when it led the field with films of topical events, nature studies and even acted dramas in 'natural colours.'

They were halcyon days in Hove when Williamson made pictures there; villains rode in open pair-horse carriages through stately squares, and policemen and nurse-maids would give mad chase after comic painters

who had inadvertently knocked flower-pots off porticoes on to the heads of innocent bystanders.

Few have ever heard of ex-Sergeant-Major Chart, of Brighton, yet, in the little studio at Hove, he set something in motion which has been the mainstay of the movies for many years, something which has built reputations and fortunes unparalleled in the history of entertainment—star appeal. For it was Chart, ex-Army gymnasium instructor, earning a few pounds at the Williamson studio to supplement his income, who first opened the eyes of film producers and cinema managers to the fact that the public could be interested, and vastly interested at that, in the people who acted in the new-fangled films. The Williamson films, "Still Worthy of the Name" and "Raised from the Ranks," lasted but seven minutes or so, but, in that brief span of time, feminine hearts were set fluttering. "His picture on the screen made so profound an impression on certain fair members of the audience at a picture-hall in London that a general desire was evinced for his photograph," wrote a reviewer. But though the producers "wondered whether it might not be worth while to issue post-cards bearing the features of the gallant soldier for disposal among the audience for a penny each," nothing apparently was done, though the man who chronicled this new phase in the development of the movies speculated "Pretty heroines are even commoner than handsome heroes in film subjects, and there is no reason why their portraits should not be prized any less than those of actresses whom one has seen in the flesh. Has a new method of drawing audiences been discovered?"

Such a speculation seems incredible now, until it is remembered that producers first pinned their faith to the novelty of the show itself. It never occurred to them that anyone could be interested in the queer, shadowy figures weaving the dramas in the new medium. Johnny Butt was the first man to draw a day's pay for acting in front of a movie camera; ex-Sergeant-Major Chart was the first man to make audiences more interested in the actor than in the movie, but it is safe to guess that even he could not see where it was to lead; if you had told him that actors were to get paid £4,000 a week for playing in pictures or that the Police Department in New York would have to be called out to fight back the rioting crowds who had gathered to give a favourite film idol a welcome, he would have regarded you as a madman.

Many of the early companies did not boast studios. Their stages were simply large wooden rafts out in the open air. Sunlight provided cheap and satisfactory illumination. The scenery was of the simplest and was nailed on to uprights at the back of the platform. Scenes seldom depicted more than two sides of a room. 'Props' such as chairs, tables and carpets were hired or borrowed from a near-by house. Only those who have worked on an open-air stage can imagine how incongruous it is to see a mother in a miserable attic crooning over a dying child while a couple of unsympathetic cows look on, and the camera-man brushes off flies with his disengaged hand and the fresh morning breezes threaten at every moment to deprive the ailing child of its bed-clothes. Yet scores of successful films were

made that way before the War. The critical cinema-goer might wonder why tablecloths and the heroine's hair were blowing about in a gale, but what the camera lens does not reveal the critic doesn't grieve over, and no one imagined that the only roof to the dining-room at the Manse was the bright blue sky, or that when the heroine returned Sir Guy's ring and sailed imperiously through portières, she had to take care not to fall off the soap-boxes which did duty for stairs. As like as not, the portières were nailed on to a piece of wood pilfered from a near-by fowl-house, and that the very curtains themselves were only on loan for half an hour from the saloon bar of the public-house round the corner.

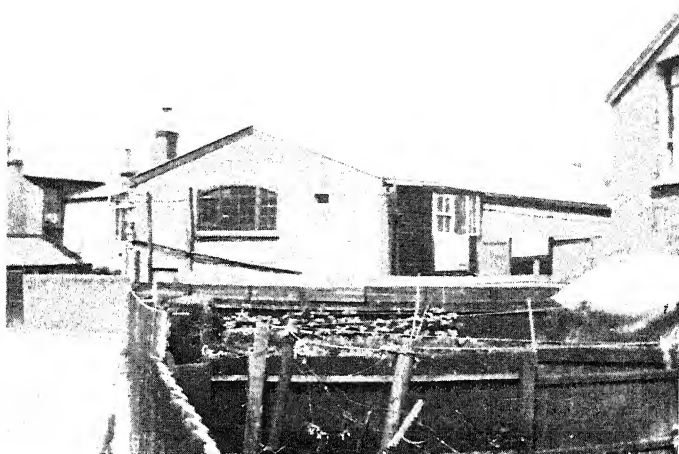
To an older generation the name Cricks and Martin and Lion's head trade-mark were as familiar as the name Metro-Goldwyn-Mayer and the M.G.M. lion to-day. The company started as Messrs. Cricks and Sharp, and the first 'studio' was a piece of waste land behind the Swan Brewery at Fulham. Whether the close proximity of the brewery had anything to do with it one can only surmise, but one of their very first productions was entitled "Drink and Repentance." This was quickly followed by "The Wife's Revenge" and "Nobbling the Derby Favourite." They were the first to introduce sub-titles into films, and were the originators of toning and tinting. When Mr. Cricks went into partnership with Mr. Martin, who acted as stage manager, they took over a house, formerly the seat of Sir John Lubbock, adjoining the railway station in London Road, Mitcham. It boasted twenty-five acres

of land, stables, ponds, orchards and a stretch of the River Wandle.

In a contemporary account one may read how 'the villagers' were hired by the day to take part in the films and how intrepid journalists, wanting to get to the bottom of the mystery surrounding the manufacture of films, were taken from London by 'pony and chaise.'

The grounds offered unique facilities for stories centring around comedians who got pushed into rivers and heroines who decided to end all by going into the water of their own free will. In fact, water played a large part in many of Cricks and Martin's early productions, as witness the titles of contemporary productions "Saved From the Sea," "Benediction of the Sea," and "Saved From the Burning Wreck."

Films embodying wild flights of fancy were popular from the earliest days, the most elaborate being "A Trip to the Moon," which ran for nine months at the Alhambra in 1902. It was made by Melies, of Paris, and was one of the few 'one round-hole perforation' films to be shown before the universal adoption of the Edison 'four-hole' or Standard perforation. It told how a professor, convinced that he could travel through space in a rocket (a project which aroused considerable doubt in the minds of his colleagues), invited inspection of his apparatus on the roof of a high building overlooking a city. The party of learned men entered the rocket, which was obligingly shot out of a cannon by a plump beauty chorus clad in tights. Arrived on the moon, the party was set upon by strange creatures, half-human, half-reptile, but the knowledgeable leader



AN EARLY HOME OF BRITISH FILMS: CRICKS AND MARTIN STUDIO
AT WADDON NEW ROAD, CROYDON



"TAKE THAT YOU CAD!"—A THRILLING MOMENT FROM "FOR
BABY'S SAKE." A BRITISH DOMESTIC DRAMA OF 1908, MADE ON

of the expedition soon found that these pests could be got rid of by hitting them on the head with an umbrella, whereupon they promptly vanished in clouds of smoke. This thinning of their ranks led the moon creatures to make a sudden assault on the men of learning, who had perforce to take refuge in their rocket. The problem of firing it back to the earth was overcome quite simply by one old greybeard pushing it off the edge of the moon and hanging on to a rope ladder which had conveniently been left outside. The rocket fell into the sea, but was successfully towed home by paddle steamer.

This film contained several mixes (the dissolving of one scene into the next), model work in the shape of the paddle steamer, as well as several other examples of what is now modern technique. The film was several hundreds of feet in length, and was far and away ahead of its time, but one can see in it the link which prompted Cricks and Martin, seven years later, to make "The Air Pirates of 1920," another futuristic film of prophetic content!

When this film was made, Cricks and Martin had already moved from Ravensbury Lodge, Mitcham, to premises at Waddon New Road, Croydon. The new studio consisted of a bare whitewashed room with a glass roof. One end was built of wood, but that did not deter the proprietors turning it into a projection booth reached by a rickety ladder and using the length of the studio as a 'theatre' in which to project the film taken during the day. At the back, skirted by a public foot-path, was an open-air stage which accommodated sets which could not be conveniently housed under the tiny

glass roof. Passers-by peering through chinks in the fence could witness all kinds of drama—from pathetic sob-stuff to broad slapstick—being enacted against a background of canvas scenery, not to say washing hanging out to dry in the gardens abutting the opposite side of the 'lot.' Here "Pimple," the first of all famous British film comedians, made most of the rip-roaring comedies which helped to sky-rocket his name into popular favour.

His real name was Fred Evans, and he was the nephew of Will Evans, the popular music-hall star. "Pimple" took his name from the character which he had created as a clown in the circus. He had a joyous recklessness and high-spirited infectiousness which endeared him to millions of film-goers. He is a popular figure on the variety stage to-day.

To return to "The Air Pirates of 1920," how is this for a forecast into what was then the unknowable future? The pirates, by airship, swooped down on a liner and stole the bullion from the strong-room and then, just to show that they were not men to be trifled with, bombed the vessel and made off. Jack Manly (who, needless to say, was the hero) succeeded in clinging to their rope ladder, a feat which ended in his being captured. Searching his pockets, they discovered the photograph of his fiancée, which had her full name and address written on the back; guided by this, they made off through the night in the direction of her home, where they kidnapped her. Manly, having served his purpose, was callously thrown overboard into the sea, but his friend the rope ladder stood him in good stead

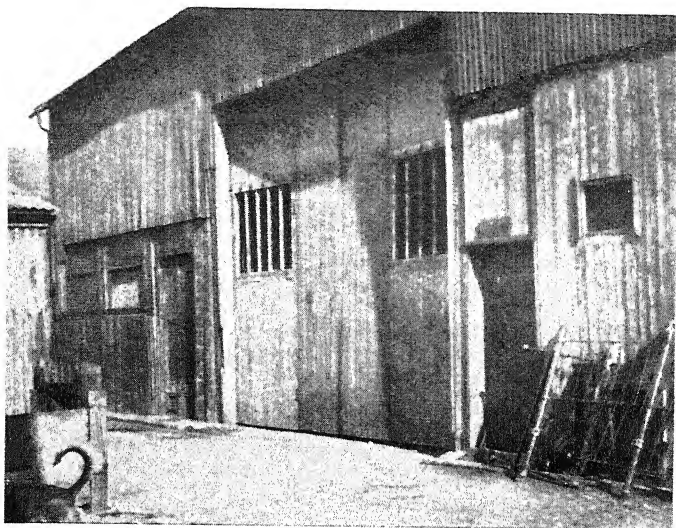
and he was towed through the water. On nearing the shore, he made for land and set off in the direction of his sweetheart's home, being unaware that she was already a captive on board the airship. But the girl had the situation well in hand, and was able to drop a note over to her lover. She quickly followed this up by discovering a 'spare bomb' and threatened to blow up the airship and its human cargo unless the pirate chief gave orders to land immediately. He had, perforce, to comply, but, on landing, the villains still pursued her. Meantime, Jack Manly had put in some good work and had got together a rescue-party. A hot chase followed, and the pirates were soon put to rout and the young lovers reunited.

Though we may be forgiven a chuckle over such a piece of delicious hokum to-day, we must concede that these early ventures in the realms of imagination called for considerable technical advances. Parallel action, model work, and trick photography were all playing their part in building up the technique of the film. The movies had definitely broken away from the stage tradition and were making earnest endeavours to establish a new medium in which to tell stories.

Another company whose name was familiar until comparatively recent times was that of the Clarendon Film Company, which started production at Clarendon Works, Clarendon Road, Croydon, in the early years of the present century, where they had one of the biggest stages in existence at that time. It measured eighty feet by eighty feet, and had an electrical installation which enabled films to be made in all weathers. Their

first production was "Off for the Holidays," and a film was turned out regularly every week. To a Clarendon player fell the unenviable distinction of being the first actor killed while acting for a film; the company were engaged in making a railway drama at Stroat's Nest Station, on the outskirts of Croydon, and a Mr. William Zeitz was enacting the role of a man who discovered train-wreckers placing sleepers across the track. In the film play, he was supposed to be knocked unconscious by the train-wreckers and left lying across the metals. His faithful dog, a Great Dane, was to give warning to stop the oncoming express. But something went wrong and the train failed to stop, struck the sleepers and swept the unfortunate actor along the track for several yards, killing him. No one was to blame, and the coroner found that Zeitz's death was accidental. The name of Zeitz heads an all-too-long list of those who have given their lives in the cause of movie realism.

After a few years, the Clarendon Film Company moved to premises in Limes Road, Selhurst. The studio, which was partly of glass and partly of corrugated iron, had its entrance in a cobbled cul-de-sac. On one side of the narrow entry were the garden fences of the houses in Limes Road, on the other were the sheds in which milk-prams were washed. Imagine stars of to-day working in similar surroundings, yet many good pictures emanated from the Limes Road plant; Haydn Coffin once played 'the menace' in a film there, and Lionelle Howard, the famous star of the old Hepworth Company, did some fine work for Clarendon under that baking glass roof concealed by the rough-



THE SCENE OF "LIEUTENANT ROSE'S" EXPLOITS. THE OLD CLARENDON FILM COMPANY'S STUDIO AT SELHURST



THE SUFFRAGETTES ARE MADE TO DIG ROADS UNDER POLICE SURVEILLANCE IN "MILLING THE MILITANTS," A CLARENDON FILM

and-ready iron and wood frontage. 'Lieutenant Rose' bombarded many a foreign power in that queer old studio, and—for the benefit of the uninitiated—Naval Lieutenants had a tremendous vogue as heroes of dramas of action before the War and several companies, notably British and Colonial with 'Lieutenant Daring' (who afterwards became the owner of his own company), exploited the idea to the full, the 'Lieutenant' in every case being a presentable young man who, garbed in the uniform of the Royal Navy, cut a dashing figure in films peopled with beautiful and innocent English girls and vampish foreign spies, invariably ending with the intrepid 'Lieutenant' getting a little of his own back for his sufferings at the hands of an unfriendly power by opening fire (no preliminary notification being considered necessary in those days, let alone instructions from on high), the whole concluding with a wonderful pyrotechnic display (in which the 'Lieutenant' came off best—for which he earned yet another medal) and the inevitable wedding bells.

Picture production was a happy-go-lucky, hit-or-miss kind of business in those days, and it is surprising that productions of entertainment standard were turned out at all in view of the conditions under which many of the companies worked.

One of "Daddy" Paul's first camera-men, Frank S. Mottershaw, soon joined the ranks of the early producers and started making films at Norfolk Row, Sheffield. Being on the borders of Derbyshire, he had plenty of scope for beautiful locations, and his first film,

"A Daylight Burglary," which was four hundred feet in length (much longer than any other British film made up to that time), caused a sensation.

A burglar entered a house through a back window and was observed by a passer-by, who informed a police-constable; the officer at once tackled the burglar, who broke away and took refuge on the roof. A struggle ensued, and the policeman was thrown off into the street below. An ambulance was quickly summoned. Meanwhile, other policemen arriving, the burglar was chased through the town into the open country before being eventually captured.

Within a few weeks five hundred copies of this film were being shown in England, and the negative was eventually sold to America.

The actors were members of a touring company playing at the local theatre, and received ten shillings each for their day's work.

Encouraged by this success, Mottershaw produced an ambitious picture called "The Life of Charles Peace," many of the scenes being taken on the very spots where the real Charles Peace committed his more sensational crimes, including the murder of Mrs. Dyson and Peace's sensational jump from a railway train when under arrest.

Most cinema-goers have heard of "The Call of the Road," which brought Victor McLaglen into prominence, but few know very much about A. E. Coleby, the man who made it. He started his film career in 1905 and received 7s. 6d. per day. His first part was that of a policeman engaged in a struggle with a

suspect. The director, who invariably had a smouldering cigarette in his mouth, worked himself up into a fever of excitement over the fight. The scrimmage seemed to last an interminable time, and eventually the combatants had to give up through sheer exhaustion, whereupon they discovered that the producer was in a worse plight than themselves. He had swallowed his lighted cigarette in his excitement.

For many years Coleby was a director for Messrs. Cricks and Martin and other leading producing companies of the early years. The story of how "The Call of the Road" came to be produced is yet another of those 'stranger-than-fiction' romances of the movies; Coleby wanted to make Jeffery Farnol's "The Broad Highway," but someone snapped it up before him, so, nothing daunted, he decided to write a scenario of his own having a similar background, but, of course, entirely different in conception. "The Call of the Road" was the result, and it was written in six days on the end of Brighton Pier.

It was one thing to write the story and quite another matter to cast it. One night Coleby was at the National Sporting Club with a friend watching a bout when he caught sight of a pleasantly ugly face and infectious grin. Clutching his friend excitedly, Coleby exclaimed: "There's the man who's going to play the lead in 'The Call of the Road.'" "Where?" asked the other, puzzled. "There," retorted Coleby, "that fellow in the ring." And so it turned out; the fellow in the ring was Victor McLaglen, the son of a Bishop, who was ultimately destined to make the 'razzberry' famous.

A heavy-set man, Coleby was what is usually known as a 'character'; he discovered Ralph Forbes, William Freshman, and many other stars, and once wrote a story with a fried fish shop as a background—"The Right to Live"—in which he himself played the lead, because someone bet him it couldn't be done. His memorial is embodied in those very vital pieces of work, "The Call of the Road" and "The Doctor Fu Manchu" series.

His last films were made in a gigantic green-house, originally intended for the cultivation of tomatoes, situated behind a row of little shops in Portsmouth Road, Esher, a building which, though its official name is 'The Pavilion Studios,' is still spoken of to-day as 'Coleby's Conservatory.'

As one walks down the studio 'street' between the power-house and the huge sound-proof stage at the Associated Talking Pictures Studio at Ealing Green, the eye encounters a glass roof shining in the sun. An orchestra is playing, the dynamos are roaring in the power-house, and Basil Dean is giving directions over a network of amplifiers to actors on an open-air set on the 'lot,' so that if you grab the arm of a passing carpenter or electrician and ask him what the glass building is next door, it is on the cards that he will tell you it is a 'factory of some kind,' and you will probably never know whether it is the noise and bustle inseparable from the A.T.P. Studio or the ignorance of the romance of the picture's past, which prevents him telling you the human story behind one of Britain's old-time film studios.

The 'glass-top' glistening in the sun was the home of Barker Motion Pictures.

One afternoon, taking tea with Gloria Swanson and Sir Nigel Playfair on "The Perfect Understanding" set inside the cavernous sound-proof stage of the A.T.P. Studios, the talk turned on old-time pictures.

"I made my first appearance," Sir Nigel told me, "in a picture made some time before the War. I was playing in 'Princess Clementine' at His Majesty's Theatre, and a film company made an offer to film the stage play. I didn't know very much about films in those days, and so it did not seem very unusual when they arranged to take the whole of us out to a factory and shoot the play just as we had acted it on the stage. When we got to the factory, the producers had already erected counterparts of our stage scenes. As soon as we got into our costumes and make-up, we started on Act 1, Scene 1, and the camera ground away steadily. As soon as we had recorded enough footage, the producer would call a halt and we would go on to another part of the play presenting possibilities for filming. In this way the whole thing was made in a day! We finished at six-thirty and the producer apologised to us—we should have finished at six! But, for the life of me, I can never think where it was we made it." When I pointed out that it was made at the old Barker studios within two or three hundred yards of where we were seated, I do not know who was the more surprised—Sir Nigel Playfair on finding that he was once again making a film on the scene of his 'former triumph,' or Gloria Swanson on discovering that Britain could

boast a film history every bit as interesting as America's.

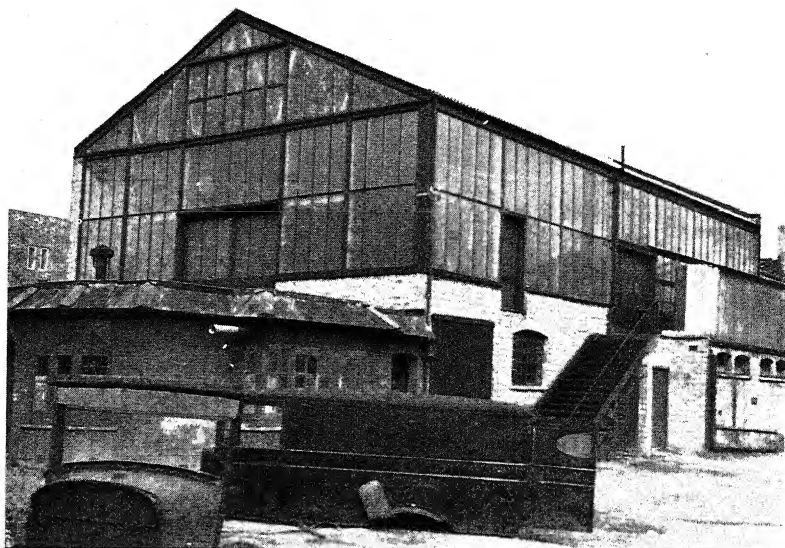
"Princess Clementine" was only one of the high spots in the colourful career of Will Barker's 'glass-top' at Ealing Green.

Will Barker—and one simply cannot think of him as William Barker or plain Captain Barker any more than one could think of Cecil M. Hepworth without the M—started his career at the age of ten and a half, pushing a barrow in the City of London for half a crown a week. At sixteen he was a commercial traveller, but it was not until he was twenty-five that he earned an average of more than eighteen shillings a week, but by that time he had managed to save a hundred pounds, put away in the Post Office twopence or threepence at a time. With this capital sum he went into business for himself and retired when he was forty. But he had always been a keen amateur photographer, and the then new moving pictures held a great fascination for him, so it seemed only natural that, with his photographic training and his business acumen, he should soon find himself in the ranks of the first film producers.

Very ambitiously, one of his first pictures was "Hamlet," produced in twenty-two scenes. With the exception of a shot of Ophelia floating down the river on a raft, the whole thing was made in one day and was a reel in length, that is to say, the whole film only took fifteen minutes to screen. In order to obviate the tragedy taking too long to shoot, the whole of the twenty-two scenes were built one inside the other, carpenters and scene painters having been employed



AN OLD-TIME OPEN-AIR STAGE



THE BARKER MOTION PICTURE COMPANY'S OLD STUDIO AT EALING WHERE

for two or three weeks in advance preparing them. Thus, when the first scene had been enacted, it was only necessary to pull down the scenery for the second scene to be revealed, already in position.

The only bit of casting that received forethought was the role of Hamlet. Barker sought out a man who knew the part, and that was that. For the rest, post-cards were sent out to everyone who had ever sought work with the new concern asking them to turn up at Ealing at 8.30 a.m. on the appointed day. Those who had stipulated that they wanted more than ten shillings were not written to.

At 8.30 precisely, Will Barker mounted a chair and proceeded to cast the picture. Noticing a tall man, he announced: "You're tall enough—you can play the Ghost. Now, can any lady swim?" One woman said, modestly, that she could swim a little. "All right," said Barker, "you can play Ophelia." All the other characters were chosen in the same way.

Before ten o'clock the company was made-up and costumed and ready to act. As soon as one scene was finished the set was run off the stage, and so on to the next scene, without a stop until one o'clock, when the entire company knocked off for twenty minutes for coffee and bread and cheese. The next stop was at four o'clock in the afternoon, not for tea, but because the filming was finished and the company had been paid off.

Will Barker was certainly a hustler. He did not worry about retaking scenes; spoiled photography through bad lighting was unknown, for he used the most reliable illuminant he knew—the sun.

To his lot fell the honour of producing Britain's first super-film, "Jane Shore," which beat "The Birth of a Nation" by about a year. For this production he employed six thousand artistes, built three hundred and fifty houses, spent nearly seven thousand pounds on costumes, and his expenses sheet included an item "thirteen hundredweight of snow for winter scenes," but when, later, he made "Sixty Years a Queen" (the "Cavalcade" of its day), he re-enacted the battle of Crimea on the top of Snowdon in order to get all the snowy wastes he required without any extra burden on the property list accounts.

"Sixty Years a Queen" told the life of Queen Victoria from a tiny girl to the day of her death, and ended with the coronation of King Edward. It cost twelve thousand pounds, which was considered a colossal sum to spend on any film in those days. In conjunction with the film, the *Daily Sketch* offered fifty pounds if anyone would come forward and successfully double King Edward. Mr. Groves, of Fore Street, Upper Edmonton, a printer, claimed the reward, and avid readers were informed that Mr. Groves was "as like King Edward as any man living, and has often been mistaken for the Monarch, and has even been cheered in the streets."

But if the casting of the role of King Edward in "Sixty Years a Queen" was difficult, the casting of Queen Victoria as a young girl in another "Cavalcade" picture—"The Game of Life"—made about the same period, was no less so. G. B. Samuelson made it at the Worton Hall Studios at Isleworth. It took three years and 400,000 feet of film was exposed on it. Scenes

included in it showed the first railway train and the coronation and jubilee of Queen Victoria. Five thousand people took part in the coronation scene, which stretched for a mile and a half. But the greatest production snag was the casting of Queen Victoria at the age of sixteen. Hundreds of girls were interviewed; then, quite by chance, someone noticed that the studio typist was the exact double of the youthful Queen.

One of the most ambitious scenes showed Her Majesty riding through the streets in an open carriage, cheered by the people. For the whole of one broiling day the technicians concentrated on this scene, and though they were within an ace of getting it right, something always went wrong at the last moment—either the procession moved too quickly or too slowly, or the sun went behind a cloud in the middle of the ‘shot.’

Then, when it seemed as though the scene would never be ‘put in the can,’ the late afternoon sun shone steadfastly, the populace cheered as it had been instructed and at the right moment, and the horses drew the carriage at the right pace. Eagle eyes were searching every member of the crowd to see that each and every man, woman and child was carrying out instructions.

At last the technical crew drew a sigh of relief; the scene was over and had gone to perfection.

Judge of the director’s horror when the picture was put on the screen in the studio’s private theatre and it was revealed that Queen Victoria’s carriage was empty. The girl had got frightened of the restive horses and thought she would keep out of the way until the scene

was actually going to be taken, but had stayed away too long and it had been shot without her.

History does not record what happened next, except that it cost two thousand pounds to retake the scene.

To revert to the Barker studio at Ealing, production had not always been on the same lavish scale as "Sixty Years a Queen," however, for I recall an interesting conversation with Mr. Roy Travers, who joined Will Barker's stock company in 1911. We were at the Columbia factory at Wandsworth watching some of Warner Brothers' first Vitaphone Talking Picture records being pressed—it was about 1928. Looking back, there seems to be something touching about that talk; we were saying good-bye to the past in welcoming the present—a strange present, fraught with possibilities we hardly realised then.

"Film production in the old days was quite different from what it is now," Travers was saying. "For one thing we used unadulterated sunlight to light the scenes, or, in bad weather, daylight helped out with two or three arcs. You can imagine how difficult it was to get anything like adequate lighting, especially if the sun kept on dodging in and out behind clouds. A sudden burst of sunlight in the interior of a coal-mine, for instance, was one of those things which are better imagined than described.

"We used to work hard in those days, too. I have played for as many as four producers in one day, changing my make-up a dozen times and my costume seventeen times, and played in fifty scenes, as a criminal, a spy, a doctor, an Indian fakir—so many,

in fact, that I cannot remember all of them. And that kind of thing went on for three and a half years. Even when there was a certain amount of risk attached to a scene, we never thought of having doubles. When I played in 'Jim the Fireman,' in which I had to rescue a girl from the third floor window of a burning house, I had a fortnight's drill at the local fire station before we made the film.

"I played the Prince Consort eleven times, Charles Dickens seven times, and as for the ex-Kaiser——!

"Time wasn't the only thing we never thought of wasting. I remember when we were doing 'Jane Shore' we went down to Brighton to stage the battle scene at Devil's Dyke. Just before the battle started, the director found he had a lot of costumes over and no supers to fill them. We rang up all the agencies, but had no luck. Finally I went to the gaol at Lewes to see if there were any convicts about to be released. But my luck was out; there was not so much as a single ex-convict available. However, I plucked up courage and told the Governor our troubles. Finally he released thirty men. We paid them five shillings a day, gave them their railway tickets and an insurance stamp, as well as bread and cheese and a pint of beer. The ensuing battle was one of the most realistic that I have ever seen; in fact, it wasn't until quite late in the day that we realised that most of them hadn't got the slightest idea that they were taking part in a film!

"The studio at Ealing Green was a remarkable place, it boasted about six acres of land then, but every square yard of it was used in some way. Love scenes were

filmed in the orchard, chase scenes in the drive, while the kitchen windows were always being changed from parlour windows in a cottage or fitted out with iron bars to represent a gaol. There was one place in the shrubbery which, when the sun was at a certain angle, had a distinctly tropical look, and so it came in quite handy for jungle scenes. We even used the inside of the house, while the balcony staged any number of Romeo and Juliet sequences. We had a 'property' church made of canvas which we took out and erected just beyond the trees when we wanted a scene on the outskirts of a village. In fact, there was nothing about that stately mansion which had not figured in a film play at some time or another. Even though railway travel was not so expensive as it is now, location trips were not inconsiderable items, and having all our exteriors on tap effected a considerable saving."

In 1910 Sir Herbert Tree was playing at His Majesty's Theatre in "Henry the Eighth." It was an outstanding production, and Will Barker obtained the right to film the play. Accordingly, the stage company visited the studio at Ealing Green, and, in much the same way as "Princess Clementine," the whole thing was filmed in a day. In order that the film should not compete with the stage production indefinitely, it was agreed that, after a short interval had elapsed, the whole of the copies of the picture were to be recalled from the cinemas and destroyed. Accordingly, in April, 1911, Ealing witnessed one of the biggest blazes it has ever seen. Sixty thousand feet of "Henry the Eighth" were purposely set on fire in the yard behind the studio, and

an interested crowd gathered to witness the spectacle.

During "Henry the Eighth's" short but successful career in the cinemas, there was a prophetic incident. The film was given its première at a fashionable West End theatre, and the audience comprised inveterate theatre first-nighters, no doubt lured by the magic of Sir Herbert Tree's name.

Hardly had the film started when a man rose in the stalls, screwed his monocle into his eye and drawled: "I say, you know, we can't hear a word!"

In this survey of the early studios the strict sequential order of events has had to go by the board. Two events—the founding of those famous film-houses—Gaumont's and Hepworth's will necessitate changing the scene to a court near Chancery Lane Tube Station—the recognised film market, when 'Daddy' Paul and his confrères first made movies.

CHAPTER SEVEN

CLOSE by Chancery Lane Tube Station in High Holborn is Warwick Court. Thirty-five years ago it was the recognised centre of the British film trade. A tiny paved Close through which no vehicle can pass, and occupied on either side by firms of solicitors, it is as unlike a centre of the entertainment world as can be imagined. Here the Warwick Trading Company (it took its name from the Court) was making, selling and distributing films and was the principal, if not the only, place from which films could be obtained, being, in fact, an off-shoot, under the management of Charles Urban, of the Edison concern.

To the Warwick Trading Company came a young man named Cecil M. Hepworth. He was a remarkable young man in many ways; his father was a well-known figure, a lecturer and exhibitor of magic lantern pictures and a recognised contributor to the leading photographic journals of the day. His son invented an arc lamp of new design for lantern projection. It was the first hand-fed arc lamp, and was sold to a famous optical firm in Bond Street, and the royalties from it constituted the capital with which Hepworth later founded one of the greatest British film companies.

Naturally young Hepworth was very interested in the new moving pictures, and called on Robert W. Paul

when the latter was exhibiting at Earls Court, and sold him some of his new arc lamps. He fell in with a Mr. Bert Acres, and together they gave one of the earliest command performances, an exhibition before the then Prince of Wales, the late King Edward.

Quickly realising that there was an enormous untapped field awaiting the lantern-lecturer who had the foresight and courage to exploit the new invention, Hepworth collected together a film projector, half a dozen films—the longest of which was not more than fifty feet—and a couple of hundred lantern-slides and set out on tour with a new style show, giving a two-hour entertainment. He was soon aware that his projection machine lacked many refinements which would enhance the show; accordingly, he devised a shutter to cut off the light every time the film moved a step to give place to the next tiny photograph. This obviated a great deal of the old flicker and blurring. He also devised a take-up spool which wound up the film as it came through the machine, for, up to that time, the film simply fell into the mouth of an open bag or into a box on the floor. With the success of the take-up spool he also incorporated a rewinding device which did away with the bothersome and laborious respooling by hand.

The proprietors of the Warwick Trading Company were so impressed by these improvements that they offered Hepworth a job on their staff. While he was with them he originated the system of developing and processing films which is the foundation of the principle still employed to-day. Up to the time of his entry into

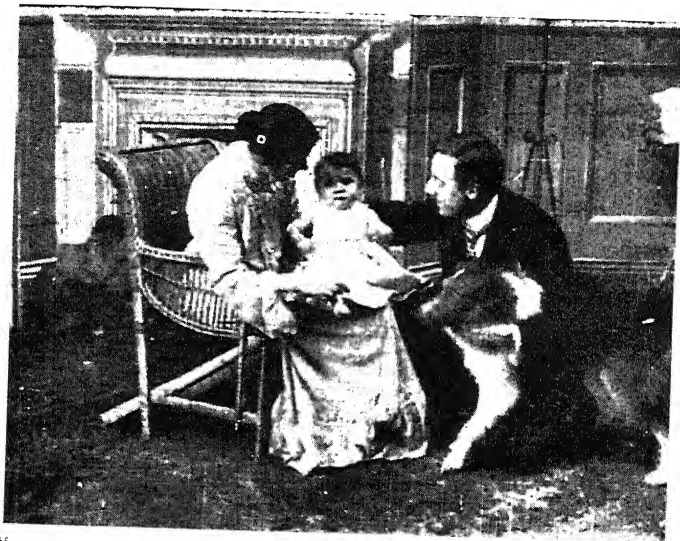
Warwick Court, films had been painstakingly wound on to pin frames and immersed into dishes of developer by hand. Now they are automatically fed through large tanks.

Notwithstanding this progress and promise, one morning Hepworth was called into the office of Mr. Charles Urban, the manager, and given his week's wages and told he would not be wanted on the following Monday as the firm had arranged to have all its photographic work done by a man at Brighton. This was a blow which might have deterred many men from following the new star, but Hepworth was built of sterner stuff.

On that day the foundation-stone was laid of the film company that was to be the most famous in Britain for many years.

Undaunted, Hepworth went to Thames Ditton to find a place suitable for setting up a film manufactory, for he had decided to start in business on his own account. But Thames Ditton, which had a plentiful supply of electric light, offered nothing suitable in the way of premises, so he went on to Walton-on-Thames, where he took over a thirty-pounds-a-year villa from an outgoing tenant, moved his belongings into the upper half, turned the lower portion into a workshop, and 'blued' a considerable part of the small capital derived from his arc-lamp royalties on a gas engine, which he promptly installed in the scullery.

He painted his own scenery, erected it on a simple open-air platform in the tiny garden behind the villa, and concocted his own stories, cleverly contriving them



"RESCUED BY ROVER," THE FILM WHICH FOUNDED THE FORTUNES
OF HEPWORTH PICTURE PLAYS. 1907



STEWART ROMIE (CENTRE) WITH COLETTE BRETTEL AND HENRY
VICTOR IN AN EARLY PICTURISATION OF SIR HALL CAINE'S "THE
PRODIGAL SON" MADE BY STOLL

so that all the parts could be played by members of his own family!

He figured that simple, homely stories in which babies and animals were prominent would appeal to the public most, so his first big success was "Rescued by Rover," in which he played the leading part, supported by his wife, their baby, and their dog Rover.

The scenario was simplicity itself—a gossiping nursemaid failed to notice a gipsy stealing her sleeping charge from its perambulator, but the faithful dog Rover trailed the kidnapper to her attic and then raced back to the distraught parents and, by his insistent barking and pleading, prevailed upon the heart-broken father to accompany him. The dog then led the way through the streets of the town to a river, which its master crossed in a rowing-boat (totally ignoring, for the purposes of the drama, a convenient bridge—from which a gaping crowd watched the making of the movie—a bridge, moreover, which was inadvertently included in the shot!). Arrived at the gipsy's hovel, the father retrieved his child and returned to his wife, the film closing with a happy scene of domestic reunion, with Rover coming in for his full mead of praise.

The girl out of the cutting-room played the nursemaid who lost the baby. Only two professional actors appeared in the production; Sebastian Smith played a soldier who flirted with the maid, thus giving the opportunity to slip up and steal the child. The gipsy, too, was a professional—Mrs. Smith. Both of them were paid half a guinea for their work because, as Hepworth said, "I couldn't get them for less."

The film was 325 feet long and four hundred copies of it were sold, representing a handsome profit, for the entire production cost only £7 13s. 9d. to make.

The villa at Walton-on-Thames was the queerest film studio then in existence, not excepting Robert W. Paul's studio at New Southgate and Edison's tarred-paper affair at Fort Lee. The gas engine Hepworth had installed in the scullery was as noisy as a traction engine. Nevertheless, the producer and his family had their meals in the same room. The kitchen had been turned into scene-painting shops, while the drawing-room was turned into the developing and printing department. The 'best' bedroom was the drying room, hundreds of feet of moist, flapping film being looped over wires stretched across the ceiling. Very often there were so many prints, as in the case of "Rescued by Rover," to be dried as quickly as possible that they overflowed on to a row of hat-pegs in the scullery. The bathroom was turned into a cutting-room, where the films were assembled, and the front sitting-room, the only really habitable room left, was the office.

The studio proper was a wooden platform, ten feet by sixteen feet, laid down in the tiny back garden. Its sole equipment was two or three wooden uprights and a cross-bar, against which the scenery could be propped.

The whole production staff was but a handful of people and they did everything. Recently, talking of "Rescued by Rover," Hepworth said: "First we exposed the negative, some of us acting and photographing indiscriminately. Then we all turned to and developed it. Next we edited it, which in those days simply meant

cutting out 'black pictures' caused by the camera stopping between shots. After that we perforated a strip of film and printed the picture. The next task was to sit down and rack our brains for alluring words with which to advertise it in the papers then devoted to the magic lantern and its newly-born brother, the cinematograph. While awaiting replies to our advertisements we went round to the various showmen close at hand and sold them copies. When we noticed a falling off in the demand for the film we all got together in our little office-cum-drawing-room and started to think up a fresh plot for another picture."

Encouraged by the success of "Rescued by Rover," Hepworth embarked on a similar picture called "Dumb Sagacity or Saved from the Tide." It was four hundred and fifty feet in length, contained not a single interior scene, and was sold outright to showmen for £11 5s. od. Its story was even simpler than "Rescued by Rover."

Whether it was the introduction of Black Beauty, a horse, as well as Rover—thus providing a double dose of animal sagacity in one half-reel—one can only conjecture, but the trade journals of the day described it as "A big success. . . . The film of the season! . . . This subject has been described by all who have seen it as the finest film ever produced!" And Hepworth's advertisement proclaimed proudly that "No less than *seven* showmen are running it in London. It is just as big a success on the Continent and further issues have had to be postponed until the orders in hand have been overtaken!"

So a dog, a horse, and a baby, and an astute young

man built up one of the first of Britain's properly-equipped film studios, for the little garden stage at Walton-on-Thames was soon covered by more elaborate buildings, comprising a couple of totally enclosed studios independent of daylight for their illumination and served by an elaborate electric lighting system.

Trade thrived in the office he had opened in Cecil Court, Charing Cross Road, and the young man of courage and vision quickly left the Warwick Trading Company, Robert W. Paul, and all his other competitors far behind.

The studio which had sprung up behind the villa in Hurst Grove soon became the home of a stock company of actors who were retained exclusively whether their services were required or not in any particular production which happened to be under way.

And a score of names soon came into prominence. Who can forget Chrissie White and Henry Edwards, as popular to-day as when film production flourished at Hurst Grove under the Hepworth banner; or Stewart Rome, who probably boasts a bigger fan mail to-day than in those early pioneer days, or tragic Lionelle Howard, who died a few years ago in a nursing home. He was one of the most promising juvenile leads of the early days and many of his fine characterisations will go down in film history. The post-war crop of film-makers hardly remembered his name and when he went to the casting office of one of the newer concerns, he was quite seriously asked, "Have you had any previous experience of film work?" But, as he lay dying, the bitterness of that blow was softened by the scores of letters which

he received from his admirers who had not forgotten him or the hours of pleasure which he had given them.

The Hepworth Company was to Britain what the 'county' is to the rest of England. Its productions had the stamp of dignity and taste and an indefinable something essentially British in character, a 'tone' which no other film company of ours, with the possible exception of the old London Film Company, has been capable of capturing. No matter what hardships the heroine suffered, she was a lady to the last foot of the film; no matter how polished, the villain was always a cad whom right-thinking men would be only too glad to have the pleasure of booting out of 'the club.' Its heroes were manly without being prigs; heavy fathers could be as heavy as they pleased but you always felt that half their heaviness was the weight of British tradition. Hepworth's even boasted what is now called a vamp. Her name is Violet Hopson, and she is a very capable actress indeed, for she not only succeeded in being a villainess, but also managed to keep up the tradition of British refinement and taste to such a degree that she was actually billed in connection with her films as 'The dear, delightful villainess.'

But if you are inclined to smile, remember that when Hepworth's were in their hey-day—"Comin' Through the Rye," "Owd Bob," "Tangled Threads," "Barnaby Rudge," "Nearer My God to Thee"—and countless other pictures—were, for the decade in which they were made, far and away ahead of anything else which England and the Continent could offer.

"Barnaby Rudge" was, incidentally, one of Britain's

first 'super-productions,' and that in the days long before America had begun to think in terms of "The Birth of a Nation." It was directed by that fine Dickensian producer, Thomas Bentley. A short time ago, after the première of his modern effort, "The Old Curiosity Shop," he recounted how he secured realism in the scenes of the Gordon Riots in his first 'big' Dickens film.

The scenes were being 'shot' at Harefield, in Middlesex, and the rabble of 1780 looked unduly docile and anæmic. No matter how he rated and scolded them they could not, or would not, put the necessary fire into their rioting. "I really couldn't blame them in my heart of hearts," he confessed. "In those days 'extras' only got half a crown for a day's work and they had already been chivvied from pillar to post for hours on end. It was when I noticed they were getting a bit restive at having to work so long that a bright idea suddenly struck me.

"Purposely I delayed the filming as much as possible, letting 'shots' hang fire interminably. This slowing up had a marvellous effect. A judicial word dropped here and there gave the impression that they would be going on working for hours yet. Then, thank goodness, one bright young man among them suggested that they strike for an extra shilling as 'overtime.' Without more ado they rushed on the cameras with all the threats and imprecations the most exacting director could wish for and the camera-man, with great presence of mind, kept on cranking, thus securing one of the finest unrehearsed scenes the screen has ever seen."

Hepworth is himself no longer prominent as a film director, but his activities on the technical side of the industry are perhaps of even greater importance now than at any other time in his career. To-day the Hepworth studio is a sound-proof building in which other voices are raised in direction or are silent at the behest of the all-conquering microphone, but, in one of the offices, one can still see a row of pegs on the wall which constitute a real link with the past. The office is part of the scullery of the original villa, and on that row of pegs were hung the drying strips of "Rescued by Rover," "Dumb Sagacity," and other early successes of the house of Hepworth and the foundations of the British Film Industry. The 'moderns' use the pegs to hang their hats on!

Quite close to the sale-room Hepworth opened in Cecil Court was another little shop, run by two young men named Bromhead. Thirty years ago it sold bottles of developer and packets of printing paper to amateur photographers.

Like that other home of the movies—Warwick Court—Cecil Court is a thoroughfare through which no vehicular traffic passes, a chasm of offices and shops and employment agencies running between St. Martin's Lane and Charing Cross Road.

In Lime Grove, Shepherd's Bush, is an enormous edifice of steel and concrete—the studios of the Gaumont-British Picture Corporation, housing half a dozen huge sound-proof stages, where many of the greatest talkie successes of to-day are produced. Between that little office-cum-shop in Cecil Court and

the mammoth building at Shepherd's Bush there is a direct link, for the last word in studios in Lime Grove actually had its beginnings in the Bromhead's photographic establishment in Cecil Court.

In addition to selling photographic requisites the Bromheads were agents for Leon Gaumont, a famous French producer of cinematograph films and apparatus. There cannot be a single picture-goer in the world who has not heard of the Gaumont-British Picture Corporation; time has wrought many changes in the personnel of the firm of Gaumont, for one thing its number of employees can, without exaggeration, be said to have increased more than a thousand-fold if not ten-thousand-fold, yet the Bromheads started it all in their little photographic shop back in the days when Victoria was Queen.

The Bromheads' first customers for the Gaumont films, which were sold under the trade name of 'Elge Brand,' were showmen from the fairgrounds and travelling fit-ups; but just as profitable as the films themselves were the projectors for showing them, and the enterprising young men did a roaring trade with their Chrono machine, which sold at about £50.

A woman proprietor of a fairground booth came into the shop one day to purchase a projector and paid for it on the spot in threepenny bits, which had to be counted out on the counter one by one as she unearthed them from different hiding places in her clothing!

Very soon the thriving little Gaumont undertaking commenced producing pictures.

The first studio was merely an open-air platform at

Fellow's Cricket Field, Champion Hill, Dulwich. One of the earliest productions was "Curfew Shall Not Ring To-night." Everyone lent a hand with this production—it was not uncommon in those days for the Bromheads to play in pictures themselves—and a quite presentable set of the belfry which figures so largely in the story was constructed out of timber and canvas. The star was a lady of ample proportions, but, despite her girth, she was determined to put every ounce, to say nothing of the pounds and quarters, into her part. When it came to the climax of the story in which the heroine leaps forward and clings to the clapper of the bell to prevent her lover meeting his death, she put such energy and zest into her rendering that the impact was too much for the scenery and the whole belfry collapsed! Needless to say, the producers and cameraman quickly followed its example when they found that the lady was unhurt.

Two other stories of the open-air 'studio' at Dulwich are worthy of being put on record. Nearly thirty years ago Godfrey Tearle played Romeo in "Romeo and Juliet" there. In between scenes, he recently told me, the cast would put the field to its rightful use and indulge in a little cricket! He treasures at home an old and faded photograph of himself as Romeo putting in some fielding, with Mercutio batting and Juliet at point!

The other is a revelation which was made by Colonel Bromhead the other day to the effect that, though the Company has never showed a deficit in the thirty-five years of its existence, the 'studio' at Dulwich was once

shown in the assets as worth *one shilling*, yet the same balance-sheet showed a profit of 1,200 per cent.

The producers were not always the directors, and Mr. Alfred Collins made many Gaumont pictures for the Bromheads in those early days. One such was "The Pickpocket," exteriors of which were made at Piccadilly Circus and outside Hampstead Heath Tube Station.

Picture the little group making a thrilling shot for this 445-foot thriller (destined to be sold at £7 8s. 4d. per copy) before an admiring and very puzzled gathering of tradesmen's errand-boys, nurse-maids and casual passers-by. The excitement was at its height when one onlooker, full of good fellowship (amongst other things), stepped forward and grandiosely offered his services.

"You can—hic—have my picture as well—hic," he volunteered.

The offer was declined with thanks, but the convivial one could not believe that the Gaumont Company could be so wanting in proper appreciation as to refuse his offer, so he made it again. Mr. Collins had this time to point out very strongly that "The Pickpocket" could not embrace any spur-of-the-moment additions to its cast. "Go on—hic—be a sport—hic—you can have my picture—hic—why don't you take it?" the inebriated one insisted.

Matters had reached an impasse. There was only one solution and the Gaumont Company took it. The reveller was solemnly handed twopence and told to go away and buy himself a drink (one could buy one for that in those days), a suggestion which he accepted in the spirit in which it was offered.

Though stars as we know the term to-day were still outside the ken of men behind the films, the Gaumont Company was not long in realising the value of big names in connection with the cinema. Herbert Darnley, the popular music-hall actor, appeared as Napoleon in "Napoleon and the English Sailor." The film opened with a close-up of Herbert Darnley in character. To Gaumonts, too, fell the lot of producing the first film in this country for which a famous author was commissioned to write the script, George R. Sims turning out "Lady Letmere's Jewellery" for them. In this production the film closed with a portrait of the author.

For the first time, too, in the history of British films, the names of the players of the leading parts were announced, and thus one saw a young stage actress standing in front of a curtain to which was pinned a placard reading, "Miss Maisie Ellis as Lady Letmere." Other famous names in connection with Gaumont films were Mr. Cooper Willis in "The Mystery of Edwin Drew"; Doctor Walford Bodie, the 'electric wizard,' who figured in a film displaying his talent, and Adolphe Becke, who figured in a biographical effort entitled "The Martyrdom of Adolphe Becke."

Just as the leaders of the industry in America discovered that the practice of selling films outright to the cinema proprietors was unsatisfactory, the Gaumont Company speedily made the same discovery and introduced the hiring system in this country. One Monday morning in November, 1908, leading exhibitors of the day crowded into the Gaumont West-End premises to attend the very first Trade Show ever held.

How different Trade Shows were then from what they are now is best exemplified by the fact that exhibitors, when confronted with too long love scenes—amorous dalliance which they took to be padding put in by the artful producer to wring additional ‘sixpences per foot’ out of their pockets—would stamp their feet in unison—thump, thump—and wrathfully chant, “Sixpence a foot! Sixpence a foot! Sixpence a foot!”

By 1914 the Gaumont Company had opened a ‘glass-top’ studio in Lime Grove, Shepherd’s Bush, claimed to be the only building in the country specially built for the production of films (Hepworth’s studio being partly a transmogrified villa and most of the others converted buildings). The glass studio has gone now, though the present studio covers the same site.

To return to 1908—by that date the multiple reel picture had arrived. One or two ambitious attempts had been made to go beyond the set limits of 1,000 feet and though exhibitors were reluctant to show a picture lasting more than a quarter of an hour, they were not averse to showing one reel each week in the hope of enticing patrons back into the theatre through curiosity.

The success which this plan gained encouraged the production of the first serial film, which hailed from Paris. It was “Nick Carter,” made by the Eclair Company.

It was a popular device then to use the names of famous characters in fiction in conjunction with films, for the law of copyright did not afford the creator of the character any protection where moving pictures

were concerned. It was most startling, therefore, to read a trade advertisement announcing that the Nordisk Film Company were offering "Sherlock Holmes," and to find in the synopsis that Professor Moriarty not only figured prominently in it, but E. W. Hornung's immortal "Raffles" aided and abetted the master criminal in the attempted undoing of Conan Doyle's famous detective!

So thoroughly British was the whole atmosphere of that particular picture that the Nordisk Company requested its London agent to send over a number of policemen's helmets of the typical English pattern, to give authentic atmosphere to the production.

Though, at that time, there was no law to protect authors against their characters being 'lifted' for films, producers of pictures were themselves the victims of pirates. An unscrupulous person could buy a copy of a film for about £10 and, by the simple expedient of faking a negative from it, use this for running off as many prints as he cared to, selling them without further reference to the creators of the original. The law of copyright had been framed before moving pictures were a practical possibility and there was no clause to prohibit this flagrant copying.

Naturally producers soon cast about for a means of stopping the ramp. They took legal advice and were informed they had no protection under the law as it stood, but that it was an offence to duplicate a registered trade mark; therefore, if they stamped every scene with their own individual registered design they could take action against anyone duplicating it. There was no way of

introducing the trade mark into exterior scenes, although it occasionally found its way on to gate-posts of houses or on to log cabins and railway stations, but it invariably found a place in all interior scenes, so that, after a time, the picture-goer of that era got quite accustomed to seeing a white bell in a circle with the word Lubin under it, stencilled on the back wall of the prison cell in which the hero was wrongly incarcerated, or to see the Pathé rooster stencilled over the heroine's bed as she lay dying in hospital.

It was a crude device and one which was often highly incongruous, for no matter what strange places the leading characters walked into, whether coal mine or Eastern bazaar, they were likely to be confronted with the word 'Hepwix' (the early trade name by which the Hepworth product was known) or the winged 'flying A' sign of the American Film Company.

With the revision of the Copyright Act, the 'trade-mark-on-the-scenery' fetish disappeared, but not before exhibitors had had a great deal to say about the crudity of the device.

From the earliest days Great Britain had exported thousands of feet of film every month to America. The American duty was 25 per cent *ad valorem*. The Americans had scarcely bothered to make films of their own while they could buy them so cheaply from abroad; not only Britain but France, Germany, Norway, Sweden and Italy were turning out scores of negatives every week and the American market offered a golden field, but, in 1908, an additional duty of 2s. 8d. *per pound* was imposed.

However curious it seems to tax films by weight, it had the desired effect, in America, in increasing the native product.

Almost from the beginning the Americans found that the Western film, or the Cowboy-and-Indian picture as it was known to every small boy, was a sure drawing card.

With the introduction of the tax, British producers set about stealing a march upon their transatlantic cousins and started making a brand of cowboy and Indian films all their own—in more senses than one! Many of these 'horse operas,' as the Americans call them, were made in Epping Forest and other more or less suitable locations on the outskirts of London. Old ladies enjoying a quiet picnic on Box Hill would have their idyll rudely shattered by the war-whoops of a dozen half-naked Cockney Cherokees suddenly appearing on the sky-line, waving tomahawks and lusting for blood. Countless 'Nells of the ranch' rode in chaps and Stetsons over the hills at Addington, Surrey, and scores of bad men in check shirts and sombreros plotted to steal the mortgage on 'the old mine' at Friern Barnet.

Somehow they lacked an air of reality when seen on the cinema's screen of illusion. The horses, hired from livery stables, were but poor substitutes for the ponies of the prairie, and the English lanes lacked that barrenness and dustiness which so stirred the imaginations of the followers of the American Broncho Billy. For many years the Americans were to send us films purporting to show English life against backgrounds dotted

with eucalyptus trees and cactus plants and prickly pears; the Knights of King Arthur could chew gum, and our courts of justice were represented as a cross between a three-ring-circus and a public auction, and we accepted it all without a murmur, apparently because we either thought the Americans knew more about our national life than we did ourselves or because, being foreigners, we couldn't expect them to know any better, but the cowboy pictures made in Surrey were quickly disclaimed by all right-thinking cinema-goers, who had had their critical faculties awakened by a scathing denunciation in a daily newspaper of a British film depicting Dick Turpin's ride to York, in which telephone poles were much in evidence.

Cowboys, big names from the stage and literary fields, personalities who had figured in outstanding law cases—everything was being tried, not to keep the movies on their feet, for there was now no fear of the new entertainment dying, but to broaden the field of the film in an endeavour to find out just really what a movie could be.

The cinema in 1908 was still being ignored by the Press, only an occasional sensational article, lavish in inaccuracies, or an infrequent scathing criticism of the crude melodrama and low farce with which most photoplays dealt, appeared, and the picture hall as a place of entertainment was non-existent so far as sophisticated people were concerned. But the masses liked 'the pictures,' and the rattle of coins at the pay-box windows was sweet music in the exhibitors' ears,

yet, at the back of film producers' minds, was the feeling that you couldn't fool the whole of the people the whole of the time. What would have happened if, one day, a man named D. W. Griffith hadn't entered the American movie business and revolutionised it, is now purely a matter of conjecture. But certain it is that Griffith lifted the film out of its shallow rut and began to open the eyes of the writers and thinkers of the day to its true possibilities.

Griffith had been a newspaper reporter (a job which entailed running the hand press, wrapping up the papers, getting subscribers, and collecting the vegetables and eggs and chickens which did currency for copies and advertising space in the remote town in Kentucky in which it was published). He had been a book salesman and a 'puddler' in an ironworks, and a rust-scraper, a hop-picker and many other things. He came to New York when he was nineteen, paying his fare by selling his bicycle. Unfortunately, on his arrival, he mistook a ferryman's directions and landed in Jersey City instead of New York and spent a week 'seeing the sights of the great metropolis' before he realised that he wasn't in the right town!

When he did land in New York, he tried to get a job on a newspaper but without success, but he managed to sell a few free-lance articles.

He had one ambition—to be a playwright. One day, in a public library, he read a book by Pinero in which the eminent author asserted that the only way to achieve success as a dramatist was to learn theatre craft by becoming an actor. Soon he was carrying a

spear for a few dollars a week in a Shakespearian repertory company.

The movies were experiencing the first 'electric theatre' boom when this versatile young man wrote one or two film scenarios; his first was an adaptation of "La Tosca," but when he took it to the Edison studios they turned it down on the score of expense—it had too many scenes. Nothing daunted, he decided to learn the film business from the inside, and Edwin S. Porter, director of "The Great Train Robbery," gave him his first part in a picture called "The Eagle's Nest," which took three days to make; entailed a life-and-death struggle between the budding movie actor and a stuffed 'property' eagle with hinged wings, and resulted in an addition of £3 to his income.

After that — so it seems — scenario-writing came easier and, in all, he wrote nearly 400 scenarios and confesses that he sold at least four or five of them at prices varying from £1 to £3 each.

In 1908 Griffith was playing for the old Kalem company in one-reel productions, two of which were "Ostler Joe" and "When Knighthood was in Flower." He also wrote at that time a scenario called "Over the Hill to the Poorhouse" and sold it to H. M. Marvin, head of the American Mutoscope and Biograph Company. It so happened that, shortly after, the Biograph Company's producer fell ill, and because he could write stories and had been a 'real actor,' Griffith was given a chance to direct his first film. The story was called "The Adventures of Dolly," and was from his own pen.

The moment Griffith took up the directorial mega-



D. W. GRIFFITH DIRECTS HIS FIRST TALKIE, "ABRAHAM LINCOLN," WITH WALTER HUSTON
AND UNA MERKEL

Courtesy United Artists.

phone quite a lot of things happened to make the movie business take on an entirely different aspect. Though the outside world knew little and cared less about his 'arrival,' scores of people in the business sat up and took notice. One of the first was the American Biograph's camera-man, but that story must wait awhile until we have explored the Biograph's studio in order to get a proper perspective of American film-making in those days.

The Company's original 'studio' had been an open-air 'stage' on the roof of a high building at 841, Broadway, New York. When steam from near-by trains and smoke from neighbouring chimneys blew across the set the actors had to remain rock-rigid, 'holding' the action until the atmosphere was again clear enough for photography. Often the wind would play havoc with the scenery, occasionally depositing a 'flat' on the heads of the passers-by in the street below.

But when Griffith went to Biograph, the company had found a home in an old and rather ugly house in East Fourteenth Street. It had been the once fashionable home of a millionaire, and cockfights had actually been staged on the very floor where the Biograph Company's directors now staged dramas of pathos and passion. The old building had been many things in turn. Just before the A-B concern rented it it had been a piano sale-room and concerts were held in the long room which now held the rather shamefaced troupe of movie actors who comprised the stock company—shamefaced because, to a member of the theatrical profession, it was race suicide to have anything to do with

the despised flickers. If one did, one's only hope lay in the fact that one's fellow-artistes and prospective employers never, under any circumstances, entered the dreadful dens in which they were shown and there was therefore little likelihood of one's association with the horrible things leaking out in professional circles.

The A-B's actors and actresses did their day's work, took their pay cheques and disappeared, for ever wiping out the memory of their brief appearance before the grinding movie camera. There were a few among the group who took their work seriously, but they were either too young to have learned the glamorous traditions of the legitimate drama or too old to care for them anyway, but the young actor Griffith soon became tremendously interested in the new medium.

Production expenses were cut to the barest minimum. Once when Griffith took his little band of players 'on location' to a little New England village, he was allowed only \$50 for all expenses. Shooting took longer than he anticipated and the players had to put up at an hotel for the night, but the Company was adamant about the additional expense and Griffith had to pay it out of his own pocket.

Productions were completed in a day—or occasionally two days at the outside.

The studio lighting equipment consisted of only a few mercury vapour tubes slung from the ceiling. There was a stock company of 'old hands' who had to be fitted into every production, to save, wherever possible, the hiring of actors from outside.

Not that one could always get actors from outside;

often the producer would stop an old crony in the street and ask him to come along and earn a few easy dollars the next day in front of the Biograph's camera; the old crony would promise and that was as far as it went, for invariably the old-stager failed to put in an appearance.

Yet, in spite of all these difficulties and the rigid parsimony, the young man managed to make pictures that were different from any others. True, he had to make occasional Mutoscopes, those ten-second movies consisting of photographs mounted radially on an axle and viewed through a magnifying-glass in a coin-operated machine. Perhaps curiosity has tempted you, at some time, to press a penny into the slot of a rusting machine of this type on the pier of a seaside resort; a little light has sprung into life, and while you vigorously turn the handle the mildewed photographs have flickered over and girls wearing clothes of several decades ago have enacted a flirtatious comedy. Perhaps you were actually seeing a movie produced by D. W. Griffith, the man who made "The Birth of a Nation," "Intolerance" and "Hearts of the World."

To return to his first directorial assignment, "The Adventures of Dolly," this story ran on similar lines to Hepworth's "Rescued by Rover," but its treatment was markedly different. The gipsies stole a child from young parents and concealed it in a barrel at the back of their wagon. The barrel rolled off and fell into a river; the young husband, hearing the child's cries, raced along the bank in an endeavour to catch up with the bobbing barrel. Just as it was about to meet with

disaster the father was able to seize it and release his child.

It was just over 700 feet in length, contained not a single interior scene, and incidentally the leading feminine role, that of the young mother, was played by Griffith's wife.

Griffith determined to approach the job from a new angle; he quickly realised that drama unfolded through a camera is an entirely different thing from drama enacted behind footlights. For one thing, he could change his scenery as often as he liked; furthermore, he could keep transferring the attention of the spectator from the barrel to the father and from the father back to the barrel and so on *ad infinitum*, but—and it was a very big 'but'—by shortening the tempo of each succeeding scene and by speeding up the action he could create an atmosphere of dramatic tension and suspense entirely unlike anything attainable by the cumbersome methods of the theatre. In short, he arrived at—not by accident but by careful thought—the rudiments of what is now known as Cinema, the rock on which ever photoplay, sound or silent, is built, and, with the discovery of Cinema (and it is quite probable that he never consciously regarded it in the light of a discovery at that time), he also discovered that there was more in the making of films than merely placing a camera in front of a group of gesticulating actors and actresses and grinding film past the lens, for he laid down as one of the tenets of the craft that the camera was the narrator of the story and had itself a definite part to play in the unfurling of the narrative. It could show intimate

glimpses of things, things which could not be seen by an audience in an ordinary theatre and which had to be described or brought into prominence by theatrical subterfuges. He discovered, too, that the camera could be brought nearer to a player for a few seconds and thus indelibly impress upon an audience emotions conveyed by facial expression. No longer had movie players to keep moving because of the old dogma, originated when the first films were made, that, because a moving picture *was* a moving picture, everyone in it must keep moving at all costs. Griffith was the first to realise that there is far more drama in a static pose, provided it is cut in at the psychological moment, than in any amount of wild posturings and rantings.

His victories, however, were not lightly won and the introduction of the 'close-up' soon led to complications. It made its first appearance in "For the Love of Gold," a very free (in more senses than one) adaptation of a story by Jack London called "Just Meat." Two Westerners sat over their coffee-cups, each knowing he had poisoned the other's drink. There was no scope for gesticulations; the beholder would have to read the drama in the expressions of the two men if the thing was to be successful. Accordingly, Griffith had the camera moved nearer to the players in order to record the situation at close range. This was so wild, so fantastic an idea that the camera-man (and camera-men were all-powerful in those days, even more powerful, in many respects, than the director) threatened to walk out if it were proceeded with.

It *was* proceeded with and the camera-man *did* walk

out, the honour of recording the very first 'close-up' falling to his successor.

But further trouble was in store. In the Middle West audiences had come to accept the crude movie of the early years as the pinnacle of perfection and the sudden introduction of heads considerably larger than life annoyed them so much that they began stamping their feet and crying out, "Show us their feet! Show us their feet!"

But not even technicians or Middle West audiences could deflect D. W. G. from his self-appointed task.

With a film version of "Enoch Arden," called "After Many Years," he revolutionised the movie still more. In it he laid down the tenets which have followed the movie through silence to dialogue. "After Many Years" was the first production to boast a proper continuity or detailed script containing full directions for both players and camera as apart from the crude scrappy notes which had always done duty in the past. It contained no highly-emotional scenes, but called for restrained acting throughout. It was the first film without a chase, no one 'riding to the rescue' in the last 100 feet. And it was the first film to boast a 'flash-back,' the technical name for a scene suddenly interpolated into a sequence to show something happening elsewhere or an incident which took place in the past.

A scene of Enoch cast away on a desert island was suddenly interrupted by a flash of Annie Lee sitting at home awaiting his return.

The Biograph people did not like that and said so. "You can't suddenly put one scene into the middle of

another," they protested; "no one will know what is happening—you'll only confuse and irritate them."

Griffith, however, stuck to his point and won the day. The first man who cemented one scene to an entirely different scene had to rely on the common sense of his audience to 'read' the new medium of stories in pictures. Griffith took it a step further, brought the reading lesson to a more advanced stage and soon had the audiences 'following' him. Had he not taken the risk of their *not* understanding, the movie to-day would probably still be in the train-arriving-at-a-station stage, or, more probably, would be as moribund as the mutoscope picture.

Griffith next experimented with devices which would do for the film what the Act Drop does for the stage play, and introduced the 'fade out,' followed by the 'fade in,' to indicate the passing of time. He found, too, though this was only a passing fad, that an oiled lens invested heroines with ethereal glamour (and Griffith was strong on ethereal heroines).

Almost from the first he was striving to make pictures longer than the accepted standard single reel lasting ten or fifteen minutes on the screen. Pictures, he felt almost instinctively, demanded to be treated like plays and novels, their length being governed by their content. So, when a script came his way—it was a Civil War drama about a loyal old negro servant who carried out his master's last wishes, the kind of story Griffith loved—calling for longer treatment than was customary, he let it 'run its length,' which was two reels. When it was completed the owners of the Biograph concern

threatened to sack Griffith there and then. However, they finally decided to make the best of a bad job and released the picture as a 'serial,' hiring out the two reels as separate units, and each half bore its own title, the first being "His Trust," and the second "His Trust Fulfilled."

With "Judith of Bethulia" Griffith achieved the first four-reel picture ever made in America, but when he tried to make a picturised version of "Home, Sweet Home" in five reels the opposition was so strong ("No one will ever sit through a movie that length," the wise-aces told him) that he made five separate stories of it!

In all he has made more than four hundred pictures. At a rough computation they cost two and a half million pounds to make. They have grossed nearly twelve millions for the companies releasing them, but how much has been paid by the public to see them is beyond computation. The most profitable of all was the cinema's first epic drama, "The Birth of a Nation," which, though made on open-air stages in California and completed in 1914 and costing a mere £22,000 (and note that, though this was undoubtedly a tremendous sum to spend on a single production in those days, the British film industry, to protect itself from shoddy pictures, recently tried to put forward a scheme whereby the cost of making an ordinary *quota* picture should not be less than £20,000), netted nearly two and a half million pounds and is still being shown in cinemas to-day.

Hepworth created the essentially British film; Griffith created, not the essentially American film, but

the film which laid down the rules of the game for all time.

The old Biograph Company has long since passed away; its cameras no longer whirr in this world, but every time a camera turns in any studio, anywhere, it bears tribute to the fine old Biograph concern and the man who taught the world how to make movies. As the famous British film director Alfred Hitchcock has said, "Remember David Wark Griffith; every time you go to the cinema you enjoy, in some indirect but plainly traceable form, the fruits of his labours; to us who are endeavouring to explore new territories and to carry on his torch, he is the honoured Head of our profession."

For all his achievements, Griffith's name, in 1908, was still unknown to few outside the circle of the studios or in the theatrical walks of New York life, but if his name was unknown, so were the names of his players. In those days Mack Sennett played all kinds of roles for Biograph—from custard-pie clown to millionaires with incipient heart disease. Griffith's leading ladies were his wife and Florence Lawrence. The latter started life as "Baby Flo, the Whistling Wonder" and graduated in motion pictures in the Vitagraph studio, where she earned \$15 a week, until D. W. G. lured her over to Biograph with an offer of \$25.

The old Biograph studio was, in fact, a nursery in which many famous stars made their débuts. Blanche Sweet, the Gish sisters, Owen Moore, Alice Joyce, Lionel Barrymore, Mabel Normand, Henry B. Walthall, Constance Talmadge, James Kirkwood, Mae Marsh and many others made their débuts before the

all-conquering camera in that one-time piano saleroom-cum-cock-pit.

Flora Finch, the screen's first funny woman, who made history with John Bunny a few years later at the Vitagraph studios, played comedy bits, and the leading man was Arthur Johnson who, like Florence Lawrence, became one of the first famous movie stars. When Griffith discovered Johnson he was walking down the street. "Come and act in a picture that I'm just going to make," Griffith invited without introduction. "I don't know anything about moving pictures," Arthur Johnson protested. "Come along to the studio," Griffith insisted, "and I'll tell you everything you have to do." And so, without any previous training, Arthur Johnson stepped into a career that was to make his name famous to thousands and to give the movies one of the finest leading men it has ever known.

Famous as these names became, the Biograph Company and D. W. Griffith were destined to introduce yet another—a name which will live as long as that of Bernhardt—Mary Pickford.

CHAPTER EIGHT

MARY PICKFORD played a vital part in helping D. W. Griffith raise the film from the despised Nickelodeon (the terse but expressive name used by the Americans to describe the early picture shows when the charge for admission was the all-round one of one nickel) to its present position.

Although not the first film star, Mary Pickford became the first *great* film star. When silent films were at their zenith her fame was greater than Garbo's to-day, for Mary Pickford spoke in the universal tongue of the silent film to the peoples of the world.

From the very first Mary Pickford captured the public's imagination. Some there are who think that, without reflecting in any way upon her ability as an actress, she won such a high place in public esteem because she was lucky to drop into movies when she did.

Undoubtedly, in 1909, the cinema-going public was growing a little disgruntled at seeing the same sprinkling of players crop up sometimes two or three times during a programme, without being able to attach a name to their favourites when talking about them to friends.

A 'fan' public had come into existence. When it wanted to write to a player to obtain a photograph or autograph, it addressed its letters simply to "The

Engine Driver, Lubin Studios, Philadelphia," trusting to luck that the studio staff would be able to recognise from the description of the part with which a certain player was identified the actor for whom the letter was intended. Little did they know that most studio executives frowned upon any kind of publicity for their actors, fearing they would ask for a rise in salary or be lured away by other companies if they became too well known!

At the time of Mary Pickford's arrival, Florence Lawrence was the most popular actress in pictures. She was billed simply as "The Biograph Girl." Her rival for screen honours was Mary Fuller, "The Edison Girl." These descriptive titles were the employers', and not the stars' property, so that, in the course of time when Florence Lawrence went over to the Imp Company and became "The Girl of a Thousand Faces," Mary Pickford fell heir to the title of "Biograph Girl."

Could Florence Lawrence or Mary Fuller have captured the imagination of the picture-goer in quite the same way as Mary Pickford did if their real names had been divulged? It is a debatable point and can only be answered by the statement that, while Mary Fuller and Florence Lawrence are but legends to the present generation, Mary Pickford's name still conjures up the old magic which it held twenty years ago. Mary Pickford, in short, created the greatest asset the movies has ever possessed—star appeal. Other girls might become "Biograph Girls" or "Girls of a Thousand Faces," but there was only one Mary Pickford, that half-woman, half-child, with a tantalising streak of the gamine as



MARY PICKFORD IN ONE OF HER EARLIEST PARTS, IN "THE OLD ACTOR," WHEN SHE WAS STILL KNOWN AS THE BIOGRAPH GIRL



—Courtesy United Artists.

MARY PICKFORD TO-DAY, WITH LESLIE HOWARD IN "SECRETS"

well as the lady, who became in very truth The World's Sweetheart.

Griffith breathed life into the movies with his technique; Mary Pickford breathed love into them with the sweetness of personality. Without personality, both before and behind the screen, the movies might have perished. Mary Pickford, then, was the complement of Griffith's genius.

Who is Mary Pickford? She was born (at 169, University Avenue, Toronto, Ontario, Canada) Gladys Smith. No. 169 was a tiny doll's-house of a home, hardly bigger than Peggoty's boat. It boasted two windows either side of the miniature front door and a little dormer window set in the roof above. Mary's father was a worker on a St. Lawrence River boat, but he died, as the result of an accident, when Mary was a child. Mrs. Smith, with her three small children, had a hard struggle to bring up her family, but good fortune smiled on her when the advance agent of a travelling theatrical company chanced to pass down the street and stopped to watch Mary at play.

Something in her childish grace and simplicity caught his fancy, and he sought Mrs. Smith's permission to take the little girl on tour. Although only five years old, Mary played Cissy in "The Silver King," and, by 1902, she was star of "The Fatal Wedding." Followed other tours, notably "The Child Wife," "New York Life," and "The Little Red Schoolhouse," before she obtained a 'shop' with the great David Belasco in his New York production of "The Warrens of Virginia."

It was Belasco who decided that Gladys Smith was not a good name for an actress, and asked her to think of another. She recalled one of her mother's relatives who bore the name Pickford, and to this was coupled the sweet and simple 'Mary.'

Though she claimed her full share of praise in the Belasco play, New York was reluctant to offer Mary a permanent home, and by the time she was seventeen she had played with many touring road shows, and, in the summer, when ordinary theatrical business became slack, with the fit-ups, or one-night stands, at country fairs. 'Playing the kerosene circuit,' the Americans call it, a robust and descriptive title for a robust and colourful mode of earning a living. It put Mary Pickford into direct contact with simple, homely folk and taught her the kind of characters they love or hate, an invaluable training which stood her in good stead in the early movie days when screen drama catered solely for just that type of audience.

In the late spring of 1909, even the 'kerosene circuit' had nothing very alluring to offer, and, as funds were getting low, Mary's mother told her to try her luck with the American Biograph and Mutoscope Company at East Fourteenth Street.

The whole family—Mrs. Smith, Jack, Mary and Lottie—had often got parts in the same play on tour, other times Mary had gone out under the chaperonage of a Mrs. Gish, whose own daughters, Dorothy and Lilian, played child parts of the kind in which Mary specialised. Word had reached the Pickfords that the Gish girls were working for the Biograph Company.

Mrs. Smith saw no reason why Mary should not get something there too, if only for a few weeks, until the late summer theatrical tours started.

Mary did not like the idea. The movies were beneath contempt, but needs must when want beckons its gaunt finger.

The fare to the one-time piano sales-room on East Fourteenth Street was five cents, which, together with the fare back—another five cents—was ten cents in all, a sum which represented quite an outlay to the girl who, a few years later, was to reckon her income at the rate of nearly a quarter million pounds a year, so Mary took a five-cent transfer. With this she could get a cross-town car and then change to an up-town car and trust to luck the conductor did not notice that the time stamp on it was not in order, for it was an offence, if only a technical one, to travel up-town on a cross-town transfer.

She got off the car at Union Square and climbed the broad steps of the ugly brownstone front of Number 11, East Fourteenth Street and presented herself at the office barrier. When she asked to see the manager, the clerk wasn't very impressed; she was less than seventeen, and, in his estimation, could hardly call herself an actress. "I've been with David Belasco," she insisted. The clerk refused to be impressed, and replied with what was, in 1909, the equivalent of: "Oh yeah!"

Mary, incensed, turned to go. The movies were even worse than she imagined, but she found her way barred by a tall man with piercing eyes, who was staring at her so intently that she jumped to the conclusion that

he must be the type her mother had warned her against.

She tried to pass, but he restrained her, whereupon she gave vent to her opinion of the despicable movies. He listened to her tirade and then, to her surprise, gently started to answer all her criticisms.

The first play actors had not been ashamed to play in booths and barns, jeered at by the crowd or scoffed at by the unthinking; their scenery, if they had any, was but a tawdry makeshift of flimsy canvas, their foot-lights but naked wicks floating in a trough of tallow, their stalls were boxes and benches or simply the trampled turf itself, yet they had built up from those humble beginnings an art which had held its own among other arts. The movies were blazing the same pioneer path; the Biograph Company's stage might be an ex-piano warehouse, its theatres converted shops, and its players small-part stage actors glad to pick up three or four dollars for a day's work to fill in lean periods, but they were only at the beginning of things; before them lay a future at which they could only guess. The movies would not always be humble; just round the corner lay a prospect far more enchanting and promising than any the 'legitimate' stage could offer.

In spite of herself, Mary found herself listening. In the end, she had to admit that she may have had the movies all wrong.

Together they signed a contract. His name, of course, was D. W. Griffith.

The money was not big—about four or five pounds a week—but it represented regular work and a steady addition to the family's meagre income. Mary tore up

her transfer and paid her fare home on the car like a little woman.

Next morning she turned up for work and her appearance in the studio created a sensation. Mr. Griffith's latest discovery, the actors whispered to one another, looked as though she had the makings of a real winner. And they had had sufficient experience before the camera to know what types found most favour with audiences. Mary, though dainty, was not too slight to be a movie heroine, for, in 1909, audiences preferred their feminine favourites to have a reasonable proportion of curves. She had beautiful hair with natural curls, an incalculable asset where the camera was concerned, and a fresh simplicity of expression and prettiness of face that would record well on film.

Her first appearance before the Biograph's camera was as an extra in "Her First Biscuits." Her contract was the usual one given to A. B. players whereby the actor consented to play any and every type of part, from 'lead' to 'atmosphere.' In fact, during the first months of her sojourn at the old East Fourteenth Studio she would play heroine in a picture one day and obligingly walk on as a guest at a wedding the next.

The trifling domestic comedy of a young wife who tries her hand at making biscuits, which cause acute indigestion to everyone who eats them, passed almost unnoticed in London because Gaumonts, the same week, were issuing a film of Mr. Latham's unsuccessful attempt to fly the English Channel, which was considered far more exciting and epoch-marking. No one realised that through the half-open door of "Her First

Biscuits" the girl who was to help Griffith "make the movies" had slipped unannounced on to the rainy, flickering screens of the American nickelodeons and the English shop shows and was destined to raise the movies to undreamed-of heights.

"Her First Biscuits" was a six-minute comedy. The trade advertisement of it read as follows:

Biograph Company, U.S.A.

Biograph films—You Can See Them Think.

The following subjects will be released on the 28th July:

"Was Justice Served?" Length, 962 feet.

Showing what might result from circumstantial evidence.

"Her First Biscuits." Length, 514 feet.

A comedy subject.

"Faded Lilies." Length, 481 feet.

Bulletin fully describing the above will be sent on application.

In such inauspicious manner was Mary Pickford's début announced.

The bulletin describing the films followed the accepted form of all cinema advertising of that day. It made no reference to the cast or director, confining itself merely to a synopsis of the story, length, and price per foot.

Mary found it hard work at the Biograph studios. Floor space was limited and the actors had to confine their activities to a carefully chalked out area—one

step over the line and you were out of camera range, one step back and you were out of focus. Up in the little gallery of the one-time concert-hall, carpenters banged away at flats and scene-painters splashed distemper-brushes. Down below was a basement which boasted two dressing-rooms, one for men and one for women, and a communal but murky green-room piled with hampers which did duty as tables at lunch-time. In one corner was a little cubicle in which the films were developed and printed.

Mary found herself in this store-cum-green-room sitting next to the great Florence Lawrence. The Biograph Company allowed its players a shilling for lunch. Miss Lawrence, either through temperament or forgetfulness, ordered a meal costing one and three-pence, but Bobby Harron, who became a Griffith 'star' himself in later years, was acting as waiter and odd-job boy, and knew his job; he gave the great Miss Lawrence her shilling lunch and conscientiously forgot the little extras that would have added the forbidden threepence to the total!

Mary's first real part was in "The Lonely Villa," in which she played one of the terrified children in the crook-besieged house which gave the film its name. Marion Leonard and Henry B. Walthall had the leading parts. Then came her first real starring part—in "The Violin Maker of Cremona."

She did not have to wait long for recognition; audiences were soon clamouring to know the identity of the girl with the curls who figured as "Little Mary" in so many of the Biograph dramas and comedies, but,

though 'A.B.' raised her salary to thirty-five dollars a week, they steadfastly refused to divulge her real identity, so frightened were they that other producers would offer her a more tempting salary. But Mary was not long in waking up to the fact that she represented a valuable asset to the producers, and accordingly wrote to George K. Spoor, of the Essanay Film Company in Chicago, to ask him if he would sign her at fifty dollars a week. But Spoor thought forty-five dollars was the tiptop limit, and so she stayed on under Griffith.

There were no pre-views or 'openings' in those days, of course. Mary's films were handled just the same as all the other films turned out by Griffith for Biograph. The players appearing in them did not even have an opportunity of seeing the films run through in the studio upon their completion. If they wanted to see themselves on the screen they had to wait until the film was shown at a near-by picture-house and pay for admittance in the ordinary way.

Mary was anxious to see herself on the screen in order to study her acting dispassionately, so, one night when Griffith was keeping the company working late, she made up her mind to forgo her supper and use the 'break' to slip round the corner to a murky little shop-show picture-hall called The Gaiety, where her latest picture was showing.

Even in those far-off days there were local ordinances regarding the admission of children under sixteen to cinemas in certain precincts of New York. Mary was therefore astounded to find the doorman refusing to admit her on the ground that she was too young. She

explained that it was one of her own pictures, but he still insisted that she was too young to see it, and no amount of argument would make him budge.

The sequel is just as amusing. Mary vowed that she would never go to The Gaiety again, and kept her word. But a few years later the man who owned The Gaiety the night Mary was refused admission was paying her something like twenty thousand pounds a year. He was Adolph Zukor.

In England the renters had nothing to fear from star stealers, and so, when the clamour for 'Little Mary's' real name became hysterical, they decided, as one name was as good as another for their purpose, to capitalise her as 'Dorothy Nicholson.' And as 'Miss Nicholson' her roles were reviewed in the trade papers for many months.

When Florence Lawrence capitulated to tempting offers from Carl Laemmle when he formed the Imp Company, Mary, in the natural order of things, became the Biograph's foremost star, and was henceforth known as "The Biograph Girl." It was only when Laemmle, realising that there was money to be made out of star appeal, boldly announced Florence Lawrence and his other players by name that Biograph came into line and divulged that their 'Girl's' name was Mary Pickford, an announcement which made the British renters look foolish.

Thus was the first film star born.

And now a sidelight on the unseen drama behind the screen. In Mary Pickford's talkie, "Secrets," several notabilities from the old days played tiny parts

or extra roles. Among them were King Baggot, once one of the screen's greatest actor-directors, and Ethel Clayton. Most poignant of them all, there was the same person, once the famous star of Biograph, who ordered a lunch which cost threepence more than the recognised scale, and who made such an awesome impression on Mary in the dear old 1909 days—Florence Lawrence herself.

With the breaking of the magic circle of anonymity, the producers fell over themselves in their anxiety to cash in on any and every name that could be said to have the slightest box-office pull. It appeared as though the golden age was really at hand. The film had found its feet. It was entertainment. The black shadows of the skating-rink debacle receded farther and farther into the limbo of forgotten disasters.

But there were two little specks on the horizon which caused disquietude amongst moving picture-makers. The first was the persistent but immature attempt to wed voices to the movies. The other, at first only a passing cumulus, grew rapidly into a threatening thundercloud, which suddenly burst with a roar into a hundred legal battles, bitter and long drawn out, over the patent rights in the apparatus with which movies were made.

To take the first 'cloud' first; almost from the day in 1889 when Friese-Greene suggested that his films be linked with Edison's phonograph, experimenters and inventors had been straining to bring about a satisfactory union of sight and sound. Later, Edison had produced a combination of movie and talking machine

in some of his early Kinetoscope automatic machines; one looked through a magnifying-glass at the forty-foot strip of film and, with head-phones of the stethoscope type clamped to the ears, listened to "A Hot Time in the Old Town To-night" and watched a few seconds of a movie representing a party of yokels making merry. The machines sold at three hundred and fifty dollars, but only about fifty of them were marketed before the whole thing flopped, for, passable as the pictures were, the sound was a horrible travesty of the human voice.

With the improvement of the cylinder machine into the disc machine that we have to-day, the idea was revived. In 1901 a combined gramophone and film projector was offered for sale under the name of The Cine-Phono-Matograph, which, it was claimed, illustrated "in a marvellous manner, vocal selections from the Royal Italian Opera, Paris, and the latest singing pictures of Vesta Tilley, the London idol, singing 'The Midnight Sun'; Lil Hawthorn, the famous American comedienne in 'Kitty Malone'; Alec Hurley, the coster comedian, in 'The Lambeth Cake Walk'; and the American Comedy Four in 'Sally in Our Alley.'"

They became a mild rage, and every film manufacturer turned his attention to marketing similar synchronising apparatus—Hepworth, Gaumont, Clarendon, Will Barker, The Warwick Trading Company, and many more. Ellaline Terriss, Ernie Mayne and Marie Lloyd were all featured in these short subjects. Every Friday, for example, the Hepworth studio at Walton-on-Thames was dedicated to the making of such smash hits as "You! You! You!" and "Yiddle

on Your Fiddle." It was seldom that the star performer who had made the gramophone record appeared in the film; the usual practice was to buy the 'talkie' rights in an already popular record and play it over and over again in the studio while an actor rehearsed his lip movements to coincide with the words on the disc. When he was perfect both camera and gramophone would start up at a certain prearranged point, the actor following the words coming from the trumpet by simply mouthing the same syllables while the camera recorded the scene. In the theatre the gramophone and projector were electrically connected, a needle remaining stationary as long as synchronism was maintained but giving warning if it were in danger of being lost. Other systems employed a direct connecting shaft.

A refinement of the idea was introduced by Will Barker, who, alive to the disadvantages attendant upon tearing up the floors of the theatres to lay down the connecting shaft between projector and gramophone merely to show a three- or four-minute 'talkie,' marketed apparatus in which gramophone and projector had no direct coupling. Instead a dial with a moving hand was photographed at the same time as the scene, and it appeared in one of the lower corners of the screen.

The talking machine bore a corresponding dial and the operator had to see that the hands coincided. If the hand on the dial in the corner of the screen began to lag behind the gramophone dial, the projector had to be speeded up until it again caught up with the sounds issuing from the trumpet. By the addition of electrical

devices the idea was brought to a high pitch of perfection, and good all-round synchronisation could usually be obtained, but there was still the insurmountable difficulty of making the comparatively tiny voice on the record appear to be issuing from the lips of the considerably larger-than-life actor on the screen. Matters were not helped, but retarded by the trumpet of the gramophone being some distance away from the photographic reproduction of the actor's mouth. (It need hardly be added that this was in the days when amplification of sound by radio valves and electrical recording were undreamed of.)

Many were the devices pressed into service to increase the volume of the synthetic voice. The Gaumont Company, with their Chronomegaphone, introduced a system worked by compressed air which, catching the sound-waves in a series of compartments, actually *blew* them with force out into the auditorium!

Yet another device, one which seems almost inconceivable to-day, was the introduction of scores of telephone receivers into all parts of the auditorium, so that cinema-goers had the uncanny experience of watching a semi-mute shadow on the screen while a whispering chorus assailed their ears with a popular ditty of the day from every odd nook and corner of the hall.

By 1907, F. A. Thomassin invented a system of this kind which was so successful that it was later installed throughout the Provincial Cinematograph Theatres' circuit. An ambitious forty-minute version of "Faust" created a sensation, and it was not long before more than four hundred theatres had installed these primitive

'talkies,' and the new invention received the honour of a command performance before Queen Alexandra and the Empress Marie of Russia. The early success of the music-hall exploitation of movies was repeated, and the London Hippodrome played 'talkies' of this kind for eighteen months, presenting a programme of five short subjects.

Machines, hand-turned, could be bought for as cheaply as ten pounds, but exhibitors who could not or would not rise to this outlay, hit upon the expedient of matching up silent films with voices emanating from the mouths of elocutionists concealed behind the screen. As these mimics had only the vaguest idea as to what the actors had actually said when the photo dramas were produced in the studio, they had to vamp the dialogue as best they could. Sometimes it fitted, sometimes it didn't.

The late Mr. Dave Patterson, who opened a cinema—the Alhambra in Market Street, Aberdeen—quickly discovered that silent pictures were not proving the attraction he had hoped, so, with the aid of his wife, he embarked upon the stupendous task of fitting dialogue to every picture in the programme. He received his films on Mondays and Thursdays just before noon, and he and his wife had to set to work immediately to extemporise the dialogue in order to open the show at one o'clock. Standing on the stage behind the semi-translucent screen, they supplied the words to every one of the characters in the pictures, no matter whether they were Society dramas, Westerns, or slapstick comedies, and the whole procedure had to

be gone through afresh twice a week when the pictures were changed; but the idea proved a great success, so much so that other local managers had to follow suit in order to retain patronage.

One of them, Mr. B. H. Gates, who opened the Star Picture House in Park Street, tells an amusing story of a film which he had bought but not seen, called "The Road to Richmond," which he prepared to improvise as an idyllic British pastoral. When it started he was dismayed to find that it dealt with troops fighting, and before long he discovered that it was an American Civil War drama, the Richmond of the title being Richmond, Virginia.

Though the idea did not catch on outside Aberdeen, 'human talkies' lasted in that city until 1926.

Another equally successful hybrid 'talkie' of the kind was the film with which Eric Williams, the music-hall star, toured, but with the difference that he had the film made specially for the purpose with himself in the leading part, and the dialogue which he used in the theatre was the same as that which he had mouthed before the camera. With the clever introduction of a disappearing trick well known to illusionists, he would bewilder audiences by carrying on a conversation from the side of the screen with one of the characters in the picture and, when invited to join the other, disappeared in a trice and appeared next instant in the film. So adept did he become that all kinds of devices, bewildering and amusing, were introduced; a little girl depicted on the screen would throw a cushion at him as he stood at the edge of the stage, and he would dexterously catch

a similar cushion 'out of nowhere' at the same instant as the one in the picture hurtled towards him. Then he would threaten to give the little girl a spanking. Ventriloquially she would taunt him to do his worst, and he would spring forward and be seen the next moment on the screen as part and parcel of the picture, chasing his tormentor, all of which was carried on to the accompaniment of cleverly 'matched' dialogue.

These pictures, and those of Dave Patterson and B.H. Gates, of Aberdeen, can only be regarded as curiosities, but they nevertheless have their place in the story of the film's development, inasmuch as they show that many people in the film business were alive to the possibilities of pictures which talked as well as moved a couple of decades before they became an accomplished fact.

Various devices came and went in rapid succession during the years preceding the War in a wild endeavour to obtain perfect synchronisation between voice and film, and as new devices came to the fore, old ones slipped into the background, and more fortunes were lost than made in the frantic pursuit of perfection.

Hepworth's system met with as much success as any. Terry's Theatre in the Strand was given over to 'talkies' entirely and ran successfully for many seasons, but gradually the unequal struggle was given up; no one could be absolutely certain that the film would keep in step with the record, and there was always the insurmountable difficulty of convincing an audience that the squeaky sounds emanating from the trumpet represented the bull roar of the bad man and the plaintive wailing of the heroine, especially, as often happened,

the bad man was on the left of the picture and the gramophone was on the right.

The scratching of the needle, the unnatural sound of the voices, the uncertainty of exact timing and the ridiculous situation which arose when, as often happened in those days, the film broke and the voices went on talking, all helped to kill the first immature 'talkies' once the novelty wore off, and it was not long before the mere mention of the words 'talking picture' was enough to get one ordered out of any self-respecting film magnate's office. The Trade had had its fingers badly burned, and for many a long day refused to forget the lesson it believed it had learned.

Taking it all in all, talking pictures were a failure. True, experimenters still persisted in trying to synchronise the gramophone with the film, and a series in which Jack Mulhall, Gladys Hulette and Rex Ingram appeared before the War were still being shown on the Continent as late as 1922, but as far as England was concerned, the talking picture was as dead as the dodo in the years immediately preceding the War. It was a pity because, quite unknown to the majority of cinema audiences, as well as most people in the industry, Eugene Lauste, at a house in Brixton, perfected a sound-on-film system in August, 1913—a system practically identical with that in use in every cinema in the British Isles to-day! As its name implies, it is a system in which both sound and picture are both embodied on the one strip of celluloid film, and it is therefore impossible for sound and picture to get out of synchronisation as they run through the projector.

Lauste demonstrated his apparatus to the Press, and this is how he described it to a contemporary daily newspaper-man: "All about the scenery there are scattered microphones—little receivers. They are hidden among the flowers on a table near to which the heroine, say, is speaking. You can hide them among the bushes in a garden scene. Each separate microphone has a radius of nearly forty feet, and is so sensitive that it can easily record and transmit the sound of a match being struck.

"The next process, the photography of sound by means of light, is a highly technical one, but is well known to scientists. It can be summed up, however, in the statement that the shorter or longer sound-waves make marks of varying size on the film with which the microphones are connected, and which is doing the double work of recording pictures and sounds.

"A special film, double the width of ordinary film, is used. The left half, when the film is complete, bears the ordinary series of instantaneous photographs. On the right half you can see a jagged, clear wave-line, each twist of which records a separate inflection of sound.

"This film, when completed, is put in my new projector to be shown, the wave of light which pierces the sound side of the film afterwards passes through a special screen of my own invention.

"This is composed of tiny bars of a substance—exactly what it is must remain my own secret. These bars are so small that the eye can only just perceive them. The action of the rays on them is to make them swell to an infinitesimal extent so that they touch.

"When these little bars touch, an electrical sound-wave is communicated to the apparatus working the megaphone. According to whether the light waves make the bars touch for a shorter or longer period, the tone of the sound-wave varies."

To those who are familiar with the modern sound on film systems it will be apparent, despite some confusion on the part of the reporter, that Lauste's invention had all the essentials of the present-day talkie. It still lacked, however, an adequate amplifier for putting the sound over in a theatre. Instead, "these electrical sound-waves sent out by the screen also open or shut tiny valves," Lauste told the newspaper-man. "As these valves open, a current of air from a pump passes through, and catches and intensifies the sound made by the electrical wave. The increased sound is then transmitted through the megaphone to the audience."

The reporter who chronicled this 'story' gave it as his opinion that the invention would double the attendances "already ten shows a year per head of the inhabitants of the British Isles" (!) and give the film the one thing it had hitherto lacked—speech. His prophecy was to come true, but more than ten years was to elapse before even the dawn of its fulfilment was in sight, and Eugene Lauste's invention suffered the fate which has befallen so many of the golden dreams of picture pioneers ever since the first film fluttered through a rocking projector. Despairing of interesting British capital, Lauste gave up the unequal struggle and took his invention to the United States, thinking the newer land might be more appreciative,

but his reception there was just as cold, for, on his arrival, he found the country in the throes of war fever engendered by the conflict between the great European Powers. Recognition was not to come until years after. He ended his days in comfortable retirement in Bloomfield, New Jersey, the recipient of a stipend subscribed, in recognition of his invention, by talkie manufacturers in the United States.

That his demonstrations given before the War were of bona fide sound-on-film talkies, as we know them to-day there can be no doubt, as actual strips of the film still exist.

Yet another reason why producers of pre-war days were not interested in the new invention is to be found in the second 'cloud' which was darkening their horizon. Their hands were getting to be full with some pretty ugly troubles.

Far louder than the puny voice of the first 'legitimate talkie,' an ominous thunder was pealing through the moving picture camps.

Trouble was brewing in America. 'Patent rights,' 'infringement,' 'injunctions to restrain the use of unlicensed apparatus,' and other threatening words and phrases were growing rapidly from a whisper to an ever-increasing roar.

Soon the whole moving picture world of America was to be thrown into seething turmoil; a trade war without parallel in the history of the world was beginning, a battle not only on paper and in the law courts, but actual warfare, with thuggery and sabotage in the motion picture studios and on the 'lots'—a fierce but

stealthy guerrilla warfare of which the general public, sitting back at its ease in plush tip-ups, was to have not the slightest inkling, but which was nevertheless to threaten the film industry with the shadow of the claw-like hand of monopoly, trustification, and the extinction of the small studio, the 'little' producer, and the capitulation of the very cinemas themselves to the dictates of an omnipotent financial ring.

Everyone, nerves tense, awaited the firing of the first shot.

CHAPTER NINE

IT was fired in January, 1909.

War was declared, a war which was to last for five years, and the first skirmish was an invitation sent out by the Patents Company, as it came to be known, to all exhibitors and renters of films in the United States to attend a meeting.

Amongst the recipients of the harmless-looking request were the Warner brothers and one, Carl Laemmle. They went along with only the vaguest idea as to what they expected to hear. What they did hear was destined to send their world rocking.

The Patents Company was a trade alliance in which Edison, Vitagraph, American Biograph and one or two more large manufacturers of films and cinematograph apparatus had banded themselves together with the idea of creating a monopoly. At the meeting it threw down the gauntlet. In future all films were to be produced solely by the Patents Company or under its licence; every film distributed by the renters was to be a Patents Company film; only Patents Company's cameras were to be used for taking movies, and every projector used for showing them in the cinemas was to pay tribute to the Patents Company in the shape of a royalty of two dollars a week. In other words, movies were to be made, distributed and shown only at the dispensation of the all-powerful trust. There was to be no argument and

no discussion. The tone of the meeting made it clear that renters and exhibitors were expected to submit without question or get out of the business.

The instigators of the Patents Company foresaw that there would be much heart-burning, if not actual rebellion, when their ultimatum was delivered, but Right was on their side, the banner under which they were prepared to enforce their rights bore the grim word "Patent." Between them the individual companies and individuals represented by the Patents Company claimed to hold every valid patent in the apparatus used in connection with the manufacture of movies, at least as far as America was concerned. Anyone refusing to submit to their demands, which were a virtual command to deliver up, not only the plums of the picture business but the actual tree, root, branches and all, would quickly find himself involved in a mesh of legal actions, injunctions and suits for damages.

Behind the Patents Company was the aggregate capital of some half-dozen of the biggest producers and distributors—not a huge sum as the capital of movie companies is reckoned to-day, but awe-inspiring then to independent manufacturers like Carl Laemmle and the Warner boys. Furthermore, the Patents Company owned all the studios in which films were made, as well as every worth-while camera used for shooting them.

It was a black outlook for the little man. But there were one or two who meekly answered the invitation who left the meeting burning with indignation, men with the old pioneer fighting spirit who had no intention of calmly handing over their businesses without a

fight. Of such were Carl Laemmle and the Warner brothers.

'Uncle Carl,' as Laemmle came to be known, was the ringleader of the malcontents. He quickly realised that scattered individual firms could do little against the powerful Trust, and he therefore set about organising the Independent Motion Picture Company to 'bust the Trust,' a phrase which became the slogan of the rebels.

It was one thing to form an anti-trust combination and quite another to give effect to its objects. The Independents had no studio, no negative film of their own, let alone any productions to offer exhibitors, and they owned scarcely a camera between them. Nothing daunted, however, they remained staunch to their determination to make pictures how and when they could. With this decision there opened up one of the strangest phases ever experienced by any industry, and certainly the most remarkable in the whole history of entertainment.

Led by Carl Laemmle, the Independents grabbed any and every kind of camera, home- or foreign-made, and every foot of negative and 'raw' positive film they could lay hands on. Production started on pictures almost immediately, for if they were to continue in business as distributors and keep faith with the picture palace proprietors whom they had promised to supply with films, they had to have movies, and have them quickly. The Patents Company soon got wind of their plans. Already litigation was pending in the courts—a veritable avalanche of litigation of almost unbelievable proportions. For more than three years actions were filed

at the rate of nearly a hundred a year. But the law is notoriously slow-moving. The Trust decided to speed it up a little. If Carl Laemmle and his followers were out to 'bust the Trust,' the Trust was out to bust them, not only on paper, but actually in their hastily rigged-up studios and on location in the streets and parks. They went all out to get the Independents' cameras and produce them in court as evidence of patent infringement. But the people they employed to do this work were over-enthusiastic, for, so the Independents protested, the strong arm of sabotage was used, and not only were the Independents' cameras seized, but their offices were wrecked as well and, on occasion, their stage hands and camera-men were 'beaten up.'

The very fact that the Independents had no recognised studios was an asset in avoiding these onslaughts of the Patent Company's agents. Open-air stages would be opened by the Independents behind any convenient hoarding on waste ground in the New York and Fort Lee suburbs. Grinding out film at high pressure, the Independents' camera-men would get as many dramas and comedies 'in the can' as they could before the Patents Company discovered the plant and sent along its emissaries to put it out of action. But as soon as one open-air studio was broken up or forced to decamp at a few moments' notice, another would open up and get into its stride in an hour or two in a frantic endeavour to shoot as much film as possible before the Trust got wind of the new unit.

Not every film could be made on open-air stages, simple as screen drama was in those days; directors had

to introduce streets and parks, trains and cars, or else lose the essential mobility of the moving picture medium; consequently when the Independents went on location to make scenes in the highways and byways, they were an easy mark for their adversaries. No sooner would a camera start turning on a film than a horse-drawn van or motor-truck would appear, disgorge half a dozen huskies, who would straightway grab the Independents' camera and give as good as they received in the inevitable *mêlée* which ensued.

Everyone fought in these rough and tumbles for the mastery of what was to become one of the world's largest industries—directors, actors, stage hands and crowd-players. It is difficult to picture actors to-day fighting over the very tools of their trade, yet, in 1910, in was no uncommon sight in the streets of New York.

All sorts of ruses were resorted to in order to 'save the picture.' Odd scraps of metal and wheels from broken clocks would be arranged in the semblance of the mechanism of a film camera and fitted into a common deal case camouflaged with two or three coats of varnish and embellished with an old lens picked up from a junk stall for a few coppers. A very conspicuous handle labelled it 'movie camera' a mile off. This dummy would be displayed in the street, the actors going through a makeshift performance in front of it. Soon the Trust agents would swoop down, and, after a struggle, make off with the 'camera.' As soon as they had gone, and the Independent players had stopped laughing, the director would bring the real camera out

of a harmless-looking delivery-van standing near-by and start work in earnest.

It was a battle without war correspondents. It was only long after that many of the facets of the struggle came to light. There was, for instance, the story of an Independent's leading man who, in the middle of a pathetic love scene taken in a New York park, found himself embroiled without warning in one of the Patents Company's sorties. One moment he was making love, the next he was fighting, if not actually for life, then for the very life of the film company which employed him—its camera. In the battle he received an ugly gash in the cheek. When at last peace reigned again he found, to his dismay, that no amount of plaster or paint would conceal the wound. The camera had been saved, but if the picture were continued it would mean that, half-way through the love scene, he would suddenly turn away from the girl and reveal, for the first time, an ugly gash on his left cheek and thenceforward through the drama he would have the same ugly scar with him. Film was too precious for the director to consider scrapping the scenes he had already made, so he hit upon a valid excuse for the scar, and at the same time sent his leading man's heroic qualities up several points. They resumed shooting the love scene where it left off, taking care to turn the actor's profile so that the wound did not show. This could not go on indefinitely; sooner or later the actor would have to turn his head, so a new character was introduced in the shape of a thug who leapt without warning from out the bushes and demanded money with threats, a sub-title

explaining to the audience that he was blackmailing the hero on the grounds that he could 'expose' him to 'the park control,' whereupon the hero, his honour—to say nothing of the lady's—being at stake, sprung upon his persecutor, who took care to hit him on the left cheek. Of course, the hero was victorious, and his very realistic wound was thenceforth exhibited proudly throughout the remainder of the picture. Thus, not only was the hero's reputation for good looks saved, but also some hundreds of feet of good negative, and negative stock was a tremendous consideration.

On at least one other occasion the Independents turned their misfortunes at the hands of the Patents Company's bullies to good account. An independent director got wind of a plan to seize his camera; nothing daunted, he went on location in a quiet street in Brooklyn with a dummy camera much in evidence, his real camera being hidden in a laundry-van. As he anticipated, it was not long before the Trust men were on the scene, and endeavoured to seize the make-believe machine. Quite unknown to the combatants the real camera was grinding away, recording the fracas! Hurrying back to the studio, the astute director got to work on his negative and, with the aid of scenes left over from other pictures and the skilful use of subtitles, created a knock-about slapstick production. Exhibitors and audiences accepted it, of course, as an ordinary short comedy, but judge of the Patents Company's annoyance and chagrin when they discovered that their hirelings had taken part in a picture for the Independents and that the fight scenes—and they

lacked nothing in realism—hadn't cost the Independents a penny piece for 'extras'!

If the Press did not give much prominence to the Patents war, it may have been because of the fate which befell one of its representatives in the early days of the struggle. He was very young, very enthusiastic, and very persistent. He determined to get to the bottom of the whole matter by finding out whether the Patents Company had any justification for saying that the Independents were infringing their camera mechanism. He went to an Independent Company and explained his mission. He was received, to his surprise, with suspicion. Already the Independents had had one or two mysterious individuals snooping round and bribing their camera-men to let them see the inside of their cameras in order to procure evidence to be used against the Independents in Patents Company's actions. The more interested the young journalist became, the more suspicious the Independent Company's officials became. Finally, by the merest chance, he asked a question about the mechanism which was a key question asked by all Patents Company's spies. The journalist found himself grabbed by the scruff of his neck and the seat of his trousers and propelled through passages and down staircases until, on reaching the back door, he was given a flying kick and sent sprawling down a flight of steps into the yard. It wasn't until the next day that he realised why he had been attacked. Henceforth the Patents war received not a line in the paper for which he worked. Reticence was the better part of journalism.

In the Trade Press, however, Carl Laemmle waged

unceasing warfare, in the form of advertisements, on his opponents. Slogans, cartoons, doggerel and scathing and bitter comments were all used to further the cause of the Independents and the undoing of the Trust. It was a long and bitter fight, made more bitter by the fact that the Independents themselves could not agree, and split into two warring factions—The Independent Film Company under Laemmle became Universal Pictures later on, and the remainder The Mutual Film Company.

Undaunted by this split, Laemmle carried on the fight against the oppressors of the Independents to the bitter end. At one stage of the legal battle he was given twenty-four hours in which to prove that perforations such as those appearing on the edges of the film to accommodate the sprockets on the projector were in use, as he claimed, before the coming of moving pictures. For hours he and his lieutenants cudgelled their brains to find anything possessing perforations which would substantiate their claim of prior use. At the last moment someone produced a roll of toilet paper in which the sheets were torn off across perforated holes. This was solemnly carried into court and the contention that perforations were 'nothing new under the sun' was solemnly upheld!

Not only did Laemmle free the film from dictatorship at the hands of vested interests, but he, unwittingly, brought about two phases of the development of the film which might have remained in abeyance for years, if, in fact, they had ever come about at all. The first, as has been recorded already in these pages, was the building up of stars. He believed in carrying the

war into the enemy's camp and lured away many of their most promising players. Florence Lawrence, who represented one of his earliest prizes, was quickly followed by countless other players of note. His intention, of course, was to bring about a dearth of acting material in the Patents Company's studios. And Laemmle had an exuberant as well as an indefatigable nature, he did not intend his victories should go unrecorded, and so, when he succeeded in capturing a star from his opponents, he quickly made the player's name known throughout the cinemas in order that the public should associate the best talent with the product of his studios.

The constant sabotage of the companies making pictures 'on the side' in New York led to units being sent out on roving commissions to make pictures how and where they could in all the highways and byways of the United States. The company, consisting of a director, camera-man, carpenters, and stage hands, would set off with a dozen or more expert film actors, but no actresses. Perhaps a great canyon or a giant waterfall would suggest a background for a story. The director would rough out a scenario on the back of an envelope, the picture would be cast, the heroine and small-part players recruited on the spot from the local inhabitants and the picture put in production. Shooting would not take more than two or three days, the company putting up at the nearest inn for the night, then the entourage would move on until something else presented itself.

In this way the movies became free of the conventional four walls and city street and park bench com-

plexion which they had assumed in America during the years immediately prior to the Patents war. Naturally audiences revelled in dramas which took them through the Grand Canyon of Colorado, the deserts of Mexico and to the islands of the Pacific. This move had to be, in the nature of things, countered by the Patents Company, and so they, too, soon had their caravans out and about. Units would be gone for weeks, if not months, at a time, keeping in touch whenever possible with New York by cable, but many of them were lost, as far as their headquarters were concerned, for days on end in cases where they were so far off the beaten track that it was at least forty-eight hours to the nearest cable or telegraph office.

It was in this way that the motion picture companies rediscovered a little place called Los Angeles—rediscovered because it had been discovered at least twice before back in the piping times of picture peace, first by David Horsley, who turned a wayside hotel into a film studio, and later by the Selig Polyscope Company, which drifted into Los Angeles round about 1907 and stayed to make pictures on a vacant building 'lot' behind a Chinese laundry. Hobart Bosworth, American stage veteran, was in the neighbourhood at the time recuperating from a bad illness, and the Selig director, remembering his implied if not implicit instructions to seize whatever opportunities presented themselves, bethought himself that Bosworth might consent to play in a picture, not so much for the money (which was pitifully small in those days compared with New York stage stars' salaries), but to enliven the en-

forced idleness of his convalescence. Bosworth turned the offer down almost out of hand; he reiterated the old assertion that, to a stage star, an appearance in a film was a tacit admission of failure, but the Selig men had become accustomed to receiving no for an answer and then going back later to see if they could get the sentence revised. Accordingly they went back to Bosworth, and, after assuring him that no one who mattered would ever see the film, managed to sign him for a few days' work.

A noble snow-white horse trekked across the Alkali Desert (which did duty for the plains of Egypt) and deposited its imperial Roman rider on the steps of a lavish Eastern temple built of canvas on a plot of waste land shadowed by the backs of hoardings and topped by the rough-hewn pine telegraph-poles of the new but expanding little town of Los Angeles. The Roman drama was so much Greek to the Chinese laundrymen, whose premises abutted the 'lot,' but they would pop out of a little door at the back, spit on their flat-irons and stand grinning at the bearers of evil tidings who flung themselves at Bosworth's feet. There are many forms of madness, but this, the smiling bobbing Chinese laundrymen decided, must be the most insane of all, for did not a company of thirty or forty intelligent-looking men and women go off their heads in unison from sun-up to sun-down, all at the behest of a man with a trumpet and another with a coffee-mill.

The picture, the first of any pretensions to be made in Los Angeles, was called "In the Sultan's Power," and it convinced Bosworth that there was something

in these movies after all, and he has remained a film actor from that day to this. But neither he nor the Selig Polyscope people, let alone the Chinese laundrymen, could see in that little strip of waste land concealed by posters boosting corn-flakes and cream soda, the beginnings of an era which was to make Los Angeles one of the most important towns in America and one of its suburbs, Hollywood, a name known to millions all over the face of the earth, a name synonymous, not with snow-white palfreys hired from farms at five dollars a day or imperial palaces built of canvas on strips of tin-can-strewn waste land, but with giant studios sending out to the ends of the earth mile after mile, can after can, of drama, comedy, music, talk, and colour, with millionaires' homes, pleasure parks and luxury bathing-pools, with hotels second to none and restaurants at the tables of which are to be seen faces better known than those of any monarch who ever ruled a kingdom—the monarchs of the movies.

The new land of promise covers about twenty-five square miles and has sunshine for three hundred and thirty-four days a year, on an average. This latter fact was a factor which decided the roving bands of filmmakers to settle down there for the summer months (for several years it was customary for the units to go back to New York, Chicago, Philadelphia, or wherever they came from, during the winter), for all the early pictures were made by natural light, and to have a free and uninterrupted supply of the best illuminant of all—sunshine—represented a huge saving in production costs.

But the real factor which clinched the desirability of Los Angeles as a film centre was its proximity to the Mexican border; once across 'the great divide,' one was free—at least as long as one did not set foot in the United States until a decent interval had elapsed—from the minions of the Patents Company and their writs.

Hollywood is twelve miles from the Pacific, its summer temperature is seventy-five degrees, its winter temperature sixty-two—an ideal spot in which to make movies.

Its original name was Cahuenga; that was in 1770, when the Spanish priests said a blessing over it, and the very first covered in studio, at the corner of what is now Sunset Boulevard and Gower Street, which David Horsley opened in the very early days was called Cahuenga House.

From the Mexican and Spanish settlers Hollywood was handed over by treaty to the United States with the rest of California, the governmental price being one dollar and twenty cents an acre.

In 1883, Mr. and Mrs. H. H. Wilcox arrived in Los Angeles and took a drive through Cahuenga Valley, were attracted to an apricot and fig farm, decided to buy, built a house on the land and took up their residence. Later, on a trip to her former home in Kansas City, Mrs. Wilcox struck up an acquaintance on the train with a wealthy woman tourist from England who spoke enthusiastically of her family estate, Holly Wood. Mrs. Wilcox liked the name, remembered it, and, when she returned to Southern California, bestowed it on the farm. Mr. Wilcox, however, thought there ought to

be some justification for the title, and accordingly imported two English holly trees, for the woman on the train had said that it was this shrub which had given her family estate its title. The shrubs were planted on either side of the main gate of the farm and the name "Holly Wood" was proudly painted on a board above.

The holly trees died almost immediately, but the following year the farm was divided in two and one part became, with the passing of years, a village—Hollywood.

It is a strange anomaly that there is really no such place as Hollywood. It is a community without corporate existence—a place that thrives under a glamorous *nom de plume*.

Hollywood is not the official designation of the place that yearly produces some four hundred motion pictures; the post office does not recognise it officially; it is not the home of the stars, and Hollywood legally passed out of existence before the first motion picture was made in California.

Los Angeles, Burbank, Culver City, Westwood, and Universal City are the homes of the motion picture studios, and the stars live in Beverly Hills, Santa Monica and Malibu Beach.

The community—it is some eight miles west of Los Angeles—did not receive its official name and charter until 1903, when its 1,400 citizens voted to incorporate. (Curiously enough, the second law passed by the city council was an ordinance prohibiting the driving of more than 2,000 sheep at one time down Prospect

Avenue, the present Hollywood Boulevard, which is known throughout the world.)

In 1910, Hollywood became a part of Los Angeles and lost its corporate identity. There were times when the city of Los Angeles seemed to resent referring to its thriving suburb as Hollywood, but the name had become so romanticised by its industry that a change was impossible.

To-day the community pays its taxes to Los Angeles, but motion picture people are loyal only to "Hollywood." There is too much sentiment and too many early struggles associated with it to make forgetfulness possible.

Hollywood's population is now estimated at 180,000, and 90 per cent of its citizens are reliant upon its main industry. It boasts twenty churches—and not a single pawn-shop.

It is one of the most glamorous places on the globe, but it doesn't really exist; it is just as much a Never-Never Land as the three-ply sets which dot its movie 'lots'; so letters addressed there, as a matter of post-office routine, are prosaically redirected "Los Angeles."

While the Patents war raged and the Independents migrated to Hollywood, at least one outstanding picture emerged from the heat and dust of the battle.

It was a cinema Passion Play called "From Manger to Cross," a moving picture of the life of Christ produced by the Kalem Company on actual locations in the Holy Land and in its New York studio. The leading part was enacted by R. Henderson Bland, an English actor, now playing in films in this country.

The picture, which took two hours to show, aroused a storm of controversy, the *Daily Mail* demanding in indignant headlines: "Is Nothing Sacred to the Film Maker?"

The story was split up into five sections, the first dealing with the birth of Christ, the second revealing the flight into Egypt, the third part concerning itself with the miracles, the fourth with the Last Supper and the betrayal, the Crucifixion occupying the fifth and last.

The *Daily Express* recorded that the whole production was undertaken in a spirit of reverence, that it cost twenty thousand pounds, and that "no fewer than forty camels appeared in it."

There is no doubt that parts of the film were actually taken where they purported to be taken, but there is also an interesting story of how a desert was created in the Kalem Company's studio. As the stage was only some forty feet deep, a desert seemed a tall order on the face of it. However, the astute director had loads of sand imported. Then a back cloth of clouds and a sky-line punctuated with palms was painted. The bottom portion of this cloth was covered with glue and the sand was then swept along the floor until it met the back cloth, where it formed a nice upward curve and glued itself on to the cloth. In this manner 'real' desert and painted sky-line met without any seeming break.

The *Daily Mail* saw in the picture only blasphemous intention. It waxed indignant that the subject had been made to enrich the pockets of American film producers—why their nationality made this particularly obnox-

ious was not clear—and it invited clergymen of all denominations to record their opinions. The clergy had been invited to the trade and Press presentation at the Queen's Hall on October 23rd, 1912. Most of the invitations were accepted, and most of the clergymen who saw the film expressed their satisfaction with it! The attack on the film, presumably, was just one more flogging of that old war-horse—"The movies are beneath contempt."

So "From Manger to Cross" reached the screens, specialised screens at that, for no other films were permitted to be shown in the same programme and only devotional music was played as an accompaniment.

For years the film was shown at churches and missions. There are probably copies still in circulation to this day; the Church of the Strangers in High Street, Peckham, used to show it regularly every Easter until a year or two ago. After all, older films than that are still to be encountered in out-of-the-way places. I was recently offered the same producer's version of "Ben Hur" in "sixteen scenes," described when it was released in 1907 as "positively the most superb moving spectacle ever made in America." It took but seven minutes to show. The vendor wanted, I believe, twenty-five shillings for it, but, alas, the sprocket-holes had shrunk with the passing years and no projector could be persuaded to accommodate it.

Those who doubt that the film business is a remarkable one would do well to ponder the fact that at a time when one half of the industry was intent upon smiting the other half hip and thigh, it could find time to plan

and produce an elaborate life of the Advocate of brotherly love.

To revert to Hollywood, the first film made there (as distinct from the Los Angeles-made "In the Sultan's Power") was the Nestor Company's "Law of the Range." Another early effort featured Dorothy Davenport and was called "My Indian Hero." One of the 'extras,' playing a rough-riding cowboy, was Wallace Reid, whom Dorothy Davenport later married.

D. W. Griffith, with the American Biograph Company, was an early arrival on the Pacific Coast, but he made his headquarters in Los Angeles in 1910, where he made pictures on an open-air stage surrounded by a fence which offered a grand-stand for all the boys of the neighbourhood who wanted to see a free show.

They were happy care-free days out there in the Californian sunshine; if the pay wasn't high, at least there was not the frantic competition which there is to-day, nor the mechanisation and rationalisation of the production side of the business by supervisory experts.

Among the first to come out to seek fortune in this newly discovered land of sunshine and promise were Cecil B. De Mille and Jesse L. Lasky.

De Mille came by accident. Jesse Lasky had obtained financial backing for a film to the tune of about five thousand pounds from Samuel Goldfish, a glove salesman, better known to film-goers of to-day as Sam Goldwyn. Lasky wanted William De Mille as director of his proposed picture, but William was tied up in the theatrical business and could not get away, and his mother suggested that Mr. Lasky should take his

younger brother Cecil, who, though he hadn't done anything of note so far, held the promise of genius.

Lasky took a chance on him, and the Lasky feature Play Company was all set to embark on its first picture. Being a new venture in a comparatively new art, it was decided to strike out and find entirely new surroundings.

The original intention was to make the picture at Flagstaff, Arizona, but De Mille and his little entourage got off the wrong side of the train by mistake, and all that met their astonished eyes was rolling prairie. There was quite a flourishing township on the other side of the tracks, but the train effectually hid it from view, so they scrambled on board again as quickly as they could and went on to Hollywood.

Thus, by the merest fluke, Flagstaff missed the chance of becoming, perhaps, the film capital of the world.

The initial production was "The Squaw Man," and this was the first vehicle for Cecil De Mille's directorial genius.

As a matter of fact, the production rather bristled with the world vehicle. The only studio that the unit could find was an old stable known as the Blondau Barn, which stood in an orange grove at the corner of Vine Street and Selmar Street. One half was rented by the film company, the other being retained by its owner for the storage of carts and buggies.

The star of this first Hollywood 'super' was Dustin Farnum, who, in consequence of his stage reputation, demanded five thousand dollars for his services. Lasky

offered him, as an alternative, a quarter interest in the Company. Farnum refused it, and was paid the cash figure he demanded; had he accepted the quarter interest, he would have been part owner of one of the biggest film companies in the world to-day—Paramount—and, so far from thousands, his interest could be calculated in terms of millions.

These being the days of the Patents wars, the new company soon found itself in difficulties. It was bad enough for Lasky and De Mille to have their work interrupted at the one desk which their 'office' boasted by floods of water seeping in under the partition every time their landlord, in the adjoining part of the barn, turned his hose-pipe on his carts to wash them down, but it was quite another thing, when their negative was finally completed, to have it come back from the processing laboratories punched with perforations which were out of the true, thus making it impossible to obtain a satisfactory print.

It was an accident. There was no proof that the hidden hand had been at work. It was a black hour in which they faced this unexpected set-back. Then, without a word, Lasky rushed out of the barn to his apartment and dragged several cans of film from under the bed and went back to the so-called studio and laid them with a gesture of triumph on the table.

"What have you got there?" demanded De Mille, puzzled.

"Another negative!" announced Lasky triumphantly.

Lasky knew that film was inflammable, so he had had

two cameras turning on most of the scenes in case one of them might be destroyed by fire.

But they were not yet out of the wood. At least, half of the scenes had been taken on only one camera, and they were utterly spoiled by the faulty perforations. Then De Mille and Jesse Lasky sought the advice of Ira M. Lowry, at one time head of the Lubin Motion Picture enterprises. Of course, De Mille and Lasky were in direct opposition to the Lubin concern, as the latter was one of the parties to the Patents ring and they were Independents.

Lowry, without the knowledge of the Lubin company, decided to do the sporting thing and help these two struggling Independents to save themselves from bankruptcy at the outset by fixing up their films for them in the Lubin laboratories at Philadelphia. De Mille, accordingly, travelled from Los Angeles with the negative.

Lowry saved the day by cutting off the faulty sprocket-holes and gumming on a new set both sides of the film by hand, picture by picture!

If Lowry had not made this sporting gesture, De Mille and his associates would not only have lost all they had, but would have been involved in lawsuits for millions of dollars for the rights in the film which they had already sold.

Having little to offer but stock in their concern, De Mille and Lasky made a similar offer to that which they had made to Farnum. Out of gratitude, they wanted Lowry to take 1,000 shares in their company as a present. Considering the offer not worth accepting,

Lowry turned down what would have ultimately made him a millionaire!

De Mille and Lasky finished the final editing of the picture with guns strapped to their hips—they were taking no more chances.

In all, "The Squaw Man" has been made three times since then, but among the items jotted down in the 'log' on the first production (it was actually a penny note-book) was: "Hal Roach, cowboy, five dollars a day." But Hal Roach didn't actually work in "The Squaw Man." "He wanted too much money," said Cecil De Mille.

It has often been humorously asserted that if De Mille ever failed as a director, he could always make a living as a designer of luxurious bathrooms.

The bathroom legend, however, is rather a canard, for actually, I believe, his sum total of bathrooms in pictures to date is not more than five. But there is no doubt that De Mille, rather than being a bathroom 'king,' is an astute and practical business man, as the following two incidents show.

In a long-forgotten picture in which Raymond Hatton played the villain, De Mille sought to improve upon the flat 'all-over' lighting in vogue in those days by using controlled lighting which would throw the villain's face into a half-shadow. When he sent the picture to New York, his brother-in-law, Sam Goldwyn, cabled him to say that exhibitors threatened to pay only half-price for the film because they could only see half a face. De Mille pondered this curb to his artistic efforts for some time, and then, knowing the average

exhibitor's urge to be in the vanguard of any new screen innovation, wired back: "Don't they know Rembrandt lighting when they see it?" Which information, duly passed on, resulted in the film being eagerly snapped up.

On his desk to-day is a little silver ingot with a brief but characteristic history. When movies first began to spring up on every hand in Hollywood, the studios used to take the vats of waste 'hypo' in which films are fixed after development and pour their contents down the drains. One day a young man come to De Mille and offered to take this waste away for a small fee. De Mille saw no reason why they should pay for this privilege when the town drains were available free, so he forgot all about the young man for some days. Then the latter turned up again and suggested a lower price. Still De Mille saw no reason to pay for such a service. Then the young man offered to take it away for nothing. Finally, after a deal of argument, he actually offered to pay for the privilege of taking it away.

De Mille became suspicious and asked the young man to lay his cards on the table. The youngster confessed that he had discovered that quite a lot of silver emulsion was washed off the negatives in the fixing process and that this deposit, refined, could be transmuted into ingots of solid silver.

The little ingot on De Mille's desk is a memento of the first successful reclamation process. Every major studio reclaims its own silver to-day, yet at one time Hollywood literally poured thousands of dollars down the drain.

Barns and derelict inns could not serve as studios for

long and soon ornate stucco frontages were marking bona-fide film studios. Some of them were 'glass-tops,' those gigantic green-house affairs in which the actors used to freeze in winter and gasp for breath in summer, and which went to their eternal rest when camera-men demanded controlled artificial lighting to obtain their most cherished effects. Still other 'lots,' quite elaborate and important ones, clung to open-air stages, but the 'rafts' were gigantic affairs covered with butter muslin (to diffuse the light) on which half a dozen directors could shoot at once and on which many of the early American epics, including "The Birth of a Nation," were made.

The premises on which films are made are still called 'lots.' The term had its beginnings in the temporary accommodation which the early companies leased from land agents—building 'lots' awaiting purchase. There was nothing spectacular about the very earliest studios. Carl Laemmle was again to lead the field by providing something over which heads as well as tongues could wag. His Universal Company had a studio of sorts in Hollywood in 1912—that was in the days when the population numbered less than five thousand, but Laemmle, deciding that pictures had come to stay and, more particularly, to stay in Hollywood and Los Angeles, leased a huge ranch at Edendale, a few miles to the north of the latter town. Here he built what was then, and still is, the world's largest film studio, covering an area of more than two hundred and thirty acres. He called it Universal City. Its very foundation stones were chipped out of romance.

They were hewn by George Loan Tucker, King Baggot, Herbert Brenon, Bob Daly and Jack Cohn—five young men who dreamed dreams and saw visions. At that time George Loan Tucker was sharing a third-floor back in an old brownstone house with a friend, and the pair of them were known to their intimates as ‘The Hall Room Boys’ in consequence. In addition to the room they also shared one dress-suit between them, there being a gentleman’s agreement that the one who got home first had the prior claim to it. Tucker was working on one-reelers for ‘Uncle Carl’ then and finding it very tedious work, for he had visions of a picture which would run to many reels and mark a breakaway from the screen fare then in vogue by covering a subject that would make people sit up and think. Finally, his plans matured; he would make a multiple reel picture exposing the white-slave traffic.

Such an undertaking needed capital—at least five thousand dollars. He divulged his plan to his four friends and each promised to back him to the extent of one thousand dollars apiece.

The next problems were those of casting and studio accommodation, to say nothing of their throwing up permanent jobs in order to make “Traffic in Souls,” as they planned to call the picture. Their problems solved themselves. Uncle Carl’s company was then going through a period of turmoil. Executives were far too worried about questions of policy to worry over what was going on at the studio. So, between shots for regular one-reelers, scenes were squeezed in for “Traffic in Souls.” Several of the cast volunteered to ‘come in’

on a commonwealth basis. When the studio supervisors were busy about business concerning the progress of the company, George Loan Tucker was busy snatching an hour making scenes for his own picture. Even this unique shooting schedule did not protract things overlong. The picture, running to ten reels of negative, was completed in four weeks.

Then came the first serious blow to the conspirators' plans. Tucker was sent to England. Jack Cohn, nothing daunted, went ahead and edited the reels, inserting the sub-titles and cutting the length of the picture to six reels.

But it is one thing to make a film and another to distribute it. It was decided to give Uncle Carl the first refusal—after all, quite a lot of it had been made in his studio! Accordingly, it was arranged that Laemmle and his executive should see the picture in the company's private theatre.

No sooner had the lights dimmed out and the main titles flashed on the screen than one of the executives let fall a word about the development of the business along certain lines and the whole group fell to arguing, Laemmle quite forgetting all about the picture they were supposed to be viewing. The film unwound its six reels to an audience totally oblivious of what was happening on the screen. Then, as the lights were checked up, the business men, subconsciously aware that the show was over, rose and, still engrossed in their discussion, left the building. The executives had sat through the showing of "Traffic in Souls," but not one of them had *seen* it.

Disappointed, Jack Cohn brooded over the impasse. Finally, he decided to make a desperate plunge. He went along to Laemmle's private house and demanded audience. Laemmle came from the dinner table wondering what on earth Jack Cohn could want to see him about.

"You didn't see our picture," protested Cohn without preamble. "You were arguing all the time. That wasn't fair to us or our picture or to yourself. I want you to give us a break; I want you to let us show you the film again, so that, this time, you will really see that it is as good as we say it is."

For the young producers, five thousand seven hundred dollars of their own savings were in the balance; for Laemmle the job of looking at 'just another movie,' but it is typical of Laemmle that he admired the young men's courage. "All right," he agreed, "I'll see the picture to-morrow."

He saw the picture, liked it, but, as a business man, realised that getting exhibitors to take up a six-reel feature would be a hard nut to crack. At a meeting of the Board he introduced the subject. The executives pooh-poohed the idea of paying out all that money for one picture—why! one could make nearly twenty single-reel pictures for that sum. Laemmle, however, stood firm. If the Company did not want the picture then he would buy it himself. Thereupon, the Company wanted the picture and wanted it badly.

It was decided that, owing to its length, it should be released over a chain of legitimate theatres usually running stage plays. The Shuberts took it up and paid

thirty-three thousand dollars for a *third* share.

"Traffic in Souls" was a success.

I remember seeing it as a small boy. The posters proclaimed— "Children Under Sixteen Not Admitted," and I was far from sixteen; timidly, I shoved my sixpence under the grill of the box office and, to my surprise, the cashier accepted it without demur and the 'barker' threw wide the doors to admit me.

A stalwart young policeman tore the name board from the porch of the brothel masquerading as a servants' agency, and hit the proprietor a mighty blow on the head with it; the entire personnel of the city council, posing as a kind of Purity Brigade, was really the organisation behind the white-slave traffic, masking nefarious actions under a cloak of hypocritical 'purity' tactics; the whole of them were rounded-up—men and women—and thrown into an enormous jail (it had to be big to house them all), and they sat behind heavy grilles for all the world like the lions in the Lion House at the Zoological Gardens. As the camera slowly went past the cells, letting us feast our eyes on the degradation of each of the hypocritical city fathers, my childish ears rung to hisses and groans from the audience around me. That is all I can remember of the film.

No doubt "Traffic in Souls" would make us laugh if it were screened to-day—that closing scene alone, with the paunchy city councillors crying and slobbering for mercy behind their menagerie bars, would appear the crudest slapstick now—yet, in 1913, it captured the imaginations and the emotions of its audiences, making them forget the screen and the theatre,

transporting them into reality, and no film can do more than that.

So great was its vogue that "Traffic in Souls" earned the distinction of being burlesqued. "Traffic in Soles," complete with the Keystone Cops piling on to old autos on greasy roads and all the other forthright fun created by Mack Sennett, exposed the alleged graft of a fish market. It was hilarious fun. What a pity the screen has lost the art of burlesque.

"Traffic in Souls" made one hundred thousand dollars. They weren't dollars long, for they soon became roads, bricks, mortar, timber. In short—Universal City.

'City' was no misnomer. The completed plant, opened to the blare of bands and all the pomp and circumstance of special trains and addresses by mayors and statesmen, actually boasted its own police force, street-cleaning department, a zoo, a club, a theatre, a library, a billiard room, a couple of hospitals, a restaurant open to the general public, an omnibus service, a school, and the first woman police chief. Its citizens included a company of cowboys who, between ending the ranch and looking after the animals in the zoo and stables, played as 'atmosphere' in Westerns. Tucked away in one corner there was even a Red Indian settlement which lived its own life, followed its own customs, and also obligingly took part in 'Uncle Carl's' pictures.

To outward appearances it was the craziest city that has ever been built. Its frontage was flamboyant in the extreme, stucco and plaster gave it the appearance of an entrance to an exhibition fun fair. Inside the lot

was no different, every building presenting on its four elevations four totally different types of architecture. One side of an administration block represented a tenement in a New York slum, its right side the entrance to an Eastern temple, the third side a hotel in Paris, and the fourth a Japanese tea-house. Even the bridges over the streams and gullies were given characteristic atmosphere, from old English cobbles to modern American cantilevers. Every road was made in a different style and the widths of no two were alike. They were, of course, all designed for use as film 'sets.'

This nightmare town took two years to build; its main street was nearly six miles long, dotted with log cabins, English country cottages and even a modern motor racing track. In all, it cost nearly half a million and when it threw open its doors in the early summer of 1915 it was considered the eighth wonder of the world. Its main stage was an open-air one, four hundred feet long and one hundred and fifty feet wide. On this gigantic platform scores of directors and their players, in line, made films simultaneously; in fact, in 1919 forty-two companies were working on the 'lot' at once! Rupert Julian would be roaring through his megaphone at his leading man pleading with the girl of his dreams to marry him, while Carter de Haven would goad on his players to fresh excesses in the sacred name of comedy and Francis Ford would whip up his flagging cowboys in Grace Cunard serials, the whole to the accompaniment of Christy making two-reel comedies. There were motor sirens, volleys of revolver fire, smashing glass, men's oaths and heroines'

cries for mercy all mingled into one indescribable din. It was the nearest approach to babel the world has known (if one excepts some of the early talkies). In short, it was a sight worth seeing and Carl Laemmle wasn't long in realising that the public would enjoy the spectacle; accordingly, a grand-stand was built opposite to the main stage and the milling fans were admitted on payment of one shilling. They could see any and every type of picture being made at once. They were satiated with intimate glimpses of their favourites. They sat from early morn till late at night chewing peanuts and shouting encouragement to the players. When a film demanded the services of a hundred or so crowd-players, the casting directors 'invited' the public down from the gallery to take part in the scene. "There will be no extra charge," they were informed by the assistant directors bellowing through megaphones. And the onlookers, eager for the thrill of playing in a picture, teemed down and overflowed the stage. It was good value for a shilling. Shades of Actors' Equity!

As is almost invariably the case with anything appertaining to the movies, the real life dramas behind Universal City were far more interesting than the window-dressing frills of the publicity man. When the city was being built, bad weather was experienced and the only road, called Cahuenga Pass, to the Providencia Ranch, the name of the site of the new studio—at best only a narrow, winding dirt-track over which everything had to be hauled—was made a morass by incessant rains, and horses and wagons and lorries were for ever being sunk in the mud. Old Charlie, the Universal

Elephant, would be sent out every half-hour or so to help push a truck out of a bog. In time he got so used to it that he used to push things that didn't need pushing, with disastrous results, so he had to be kept tethered during his brief respites from duty. The road was little better when the studio opened and many of the notable visitors who were billed to be present at the inaugural ceremony were still floundering with their cars in the mud long after the crowd and Carl Laemmle had decided to start the show.

Uncle Carl was given three rousing cheers by his staff and ten thousand visitors as an American flag unfurled, and the crowd fell into silence to hear the golden words with which he would open his golden city in the new land of promise. For some moments he was so overcome that he could not say anything at all. Finally he stammered, "I hope I didn't make a mistake in coming out here." Whether he was thinking of the half-million it had cost or the muddy road which he had to traverse we shall never know, but we do know that he didn't make a mistake.

After the visitors had had time to inspect all the wonders of the new film town, they were given the thrill of their lives by being allowed to watch an ace director making a sensational war drama. One of the scenes was a fight in the air between two aviators. The duel ended with one of the airmen climbing above his antagonist and dropping a bomb on his machine. To obtain this scene a machine with a dummy figure in it was anchored from a captive balloon some distance in the air. Attached to this fake aeroplane was a bomb, to be

exploded at the right moment by an electric contact worked from the ground. The other airman was represented by a skilled pilot with an imitation bomb. When he was above the dummy he was to swoop down and drop his fake bomb and, at the same instant, the real bomb in the fake machine was to explode and blow both dummy figure and aeroplane into a hundred pieces. The excitement was intense and everyone was keyed to the highest pitch when the real airman hovered above the dummy, seated in the make-believe plane below. The dummy bomb was dropped and the electric contact made and the dummy plane was blown to fragments, but there was a miscalculation: the force of the explosion sent the real plane spinning into a crash and the pilot was killed.

That was tragic enough, but an even greater catastrophe threatened to engulf the very studio. The year Universal City opened, California's much-vaunted sunshine was a minus quantity; the rain which had held up the building for many months continued steadily after the opening, swelling the rivers above the Pass into brimming cataracts. One night the rivers burst their banks and came flooding down upon the new but lonely City set in the hills above Hollywood. The alarm was given and everyone—stars, directors, prop boys, and stage hands—spent the night battling with the invading torrent. The cataract had to be stemmed or Universal City would be washed away. Timber, sandbags, picks and shovels, all played their parts in erecting barriers to dam the flood. Hour after hour the inhabitants of the newest and craziest of all cities waged an unending

struggle with the forces of nature to save—not their homes—but the home of Universal pictures.

They won the battle and learned their lesson. A gigantic covered stage of bricks, concrete and steel was erected as fast as men could work and when bad weather threatened there was no more being laid off the pay-roll, as in the former days of the open-air floor. Better still, there was no danger from the angry torrent, which had been stemmed for all time.

To-day, safe from floods and cyclones, Universal City is a far different place from the 'lot' of old. True, it still straggles and sprawls over acres and acres of land, but splendid roads have taken the place of the old approach road that was little better than a farm track, and modern sound-proof stages have wiped away the gigantic open-air raft stage and 'silent' studios of old. Yet it is something more than just a film studio. It is a monument to the man who freed the movies from monopoly, for Carl Laemmle won the Patents war, won it against heavy odds after six years of battle. When the verdict was announced he danced in the street. Passers-by thought him drunk. So he was—with victory.

Carl Laemmle has now retired from Universal, but the studio will always be steeped in tradition and romance.

Who knows what ghosts of the stars of yester-year strut their brief hour again and what phantom hand-crank cameras whirr when the watchmen have made their final rounds for the night!

CHAPTER TEN

THEN D. W. Griffith made "The Birth of a Nation."

There had been super-films before—"Quo Vadis?" from Italy, which reached the unprecedented length of eight reels, "Dante's Inferno" and several others—but they were pageants executed in the quasi-classical style. Griffith's film was a full-blooded effort, brimful of speed, action, romance and thrills. Being twelve reels in length it necessitated special showing; consequently it was put on at chains of 'legitimate' theatres which usually presented stage plays. It was a daring move and one which succeeded. It attracted a public which, at that time, would not have dreamt of entering the ordinary movie houses.

It marked a revolution. The days of the electric theatre and the nickelodeon were now numbered. Already these houses had become more elaborate with the passing years, the forms and chairs had given place to hard plush tip-ups, the barrel organ or pianola had been relegated to the lumber-room and a pianist vamped extempore accompaniments, while the pay-box had been moved back from the pavement into a vestibule. Even the practice of running films as long as they would draw before booking a fresh supply had become a thing of

the past with the advent of the hiring system, programmes being changed weekly or twice weekly. But the crude lithographic double-crown posters remained; to-day they have become the sixteen- and twenty-four sheet bills which still disfigure the exteriors of countless minor houses all over the world and seem destined to remain part and parcel of the picture house's make-up until the end of time. A theatre providing photographic entertainment would, one would imagine, advertise itself by large photogravure posters, but the only photographic advertising which cinemas display is the ordinary ten-by-eight-inch 'still' photograph, a dozen of which are displayed week after week with monotonous similarity.

In the West End, Cinema House, in Oxford Street, provided London with its first super-cinema and attracted a section of the younger element of the Society of the day sufficiently courageous to defy parental revulsion and steal an hour at the movies, though the Electric Palace at Marble Arch, which offered "Mirth and Merriment, Instructive and Amusing" for 6d. and 1s., and showed only Pathé films, already claimed that it was 'patronised by the élite of high Society' and was 'the picture rendezvous of the *haut ton*,' while, in Edgware Road, 'The Recreations Theatre' (admission 3d. and 6d. with a continuous performance of 'A Little of Everything—All Interesting') boasted 'audiences from the best Society.'

In 1909 one of the first important circuit of theatres made its bow—Provincial Cinematograph Theatres. There had been other chains before (some of which the



—Courtesy Univer

D. W. GRIFFITH'S FIRST SPECTACLE,
"THE BIRTH OF A NATION,"

PRODUCED IN 1914

Provincial Cinematograph Theatres absorbed as a sort of 'first bite'), but this was something much more powerful—a combine which could drive hard bargains in the matter of film rentals. Very soon it numbered sixty cinemas.

It was born of the old London Film Company (not to be confused with the modern London Film Productions), the first producing studio to be run on anything approaching the American pattern in its methods of working. It was started by a Dr. Ralph T. Jupp, and A. E. Newbould, and a young film director who had worked for Hepworth, named Percy Nash, and the American film director George Loan Tucker, of "Traffic in Souls" fame.

Percy Nash is noteworthy for having been instrumental in founding Elstree as the 'Hollywood of England' (as the newspapers will miscall it). Percy Nash, soon after the London Film Company was launched, conceived the idea of being master of his own ship, as it were, and managed to amass sufficient capital to start another film company—The Neptune. What with Hepworth's at Walton and the London Film Studios at Twickenham, Nash was convinced that the Thames Valley was far too damp and foggy to be a suitable place for producing films, so he set out to find a more suitable locality for his new venture. He tried the higher ground on the north side of London, and, at Mill Hill, near Elstree, found himself getting 'warmer,' for in that suburb was the factory of a large photographic manufacturer, which betokened the fact that the air was pure.

Farther on, at Elstree, he found just the place and,

round the corner—in Boreham Wood, in fact—the identical spot, Boreham Wood being high enough to be above most of the fog belts which plague London and the Thames.

His studio was completed in 1913. That it was modern, compact and smart-looking (it has rather the appearance of a better kind of church school from the outside) is evinced by the fact that it is now called The Rock Studio and is inhabited by Leslie Fuller, and additional modern stages are being added.

In this scholarly-looking red-brick edifice Percy Nash made ninety films, most of them either three-reel dramas or one-reel comedies. The former cost round about twelve hundred pounds each and the latter one hundred and sixty pounds, and if that isn't much money to spend on films, Mr. Nash must at least have had great fun making it go round on such 'supers' as "The Little Minister" and "Disraeli," both of which, long before Hollywood thought of them as epic subjects, first saw the light at Boreham Wood.

Some years later, when the well-known American producer, J. D. Williams, came to this country to start British film production on the grand scale, he asked Nash's advice regarding a suitable locale for a studio. "Elstree," promptly replied Percy Nash out of his own experience with Neptune pictures. And so Elstree became the home of British National Pictures and, later, of British and Dominions Film Corporation and all those other companies which spread themselves along Shenley Road.

British National was the direct forebear of British

International Pictures, and when it took up its position opposite the old Neptune plant there was already a curious film studio on the spot—a collection of army huts where H. Bruce Wolfe, with the aid of one or two tanks of water, mounds of sand and a great deal of patience, not to say inspiration, made those truly great documentary films of the War—"The Battle of Jutland," "Zeebrugge," "Armageddon" and "Ypres."

This little digression has taken us away from the forming of the first cinema circuit, but do not make the mistake that the founding of Elstree and of Provincial Cinematograph Theatres is entirely unrelated.

P. C. T., as the circuit has been known for years, suddenly assumed ominous proportions for quite a number of people, not the least of whom were the Bromheads and their Gaumont Company. But apart from minor preliminary skirmishes, things did not reach a head until 1922, when two young bankers, Isidore and Mark Ostrer, bought out Leon Gaumont's share and became partners with A. C. Bromhead.

They had tremendous faith in British pictures. They envisaged cinema studios and chains of theatres not only on the London Film Company and Provincial Cinematograph Theatres plan, but on a scale approaching that of the Paramount and Fox chains in America.

To make anything like real money on a picture it must be seen by seven million people. And if you happen to have sufficient theatres of your own to enable seven million patrons to see your films and you take a goodly share of the grist which comes grinding through the box-office mill, then you are on the high road

to becoming a force that counts in the film world. Consequently, the Gaumont Company became theatre-owners on a large scale (once, years before, Gaumonts had boasted a little cinema in the City, I believe, but had to give it up because the neighbours—all business houses—objected to the barrel organ accompaniment which helped to put the films over!).

- P. C. T. had nearly strangled them, so they fought it with its own weapons. Having brought the Lime Grove studios up to date, they began buying modern cinemas and all kinds of renting and distributing interests. Within five years they had a capital of two and a half million, and the company was styled the Gaumont British Corporation. From twenty-odd theatres, the Ostrers bought the Davis circuit, which comprised an enormous cinema in Croydon and several halls called Pavilions in such far-flung quarters as Shaftesbury Avenue, Brixton and Lavender Hill. They had been run by Mrs. Davis, the wife of a builder, who ran them 'as a hobby.' It must have been a profitable one for her, for she cleared something like half a million. Soon the Gaumont interests had acquired no less than 120 houses.

When the Quota Act was introduced Hollywood threatened not only to come over here and dominate production of films, but also control all the theatres in which they were shown.

The threat never came to anything much, as later events transpired. Most of the big companies bought or leased 'shop window' theatres in the West End—thus the Empire in Leicester Square is used as a

tremendous show-case in which to demonstrate Metro-Goldwyn-Mayer pictures, while the Carlton does the same for Paramount, and the Leicester Square Theatre for United Artists. Apart from the chain of Paramount Astorias, however, the position remained unchanged.

But the threat spurred the Gaumont Company with the intention of protecting itself by the biggest chain of theatres ever conceived in this country.

P. C. T. was a distinct obstacle, so they considered the only way to overcome it was by absorption. The Ostrers started bidding for its chain of 120 theatres.

British National Pictures, out at Elstree, had had a pretty thin time of it until a Scotch solicitor, named John Maxwell, who had run a theatre or two in his homeland, came along and took it in hand and made it into British International Pictures. He, too, thought P. C. T. looked a pretty good weapon to fight American competition, so he started running up the Ostrers' bids. He had a nice little circuit of about 150 cinemas behind him, and having put the price of the P. C. T. chain up by about half a million, he decided the pace was becoming too hot and gracefully withdrew.

Recently, Gaumonts linked up with the Hyams brothers, who own such important theatres as the Troxy, Commercial Road, and Trocadero, Elephant and Castle, theatres which the brothers built out of the proceeds of a little hall in the East End and which their mother helped to capitalise for them when they were little more than boys and which they run at a loss now, but keep going because, as they say, "mother would cry if we shut it."

Now the end of the fight for supremacy draws in sight. Maxwell has startled filmland by negotiating for the purchase of the Gaumont-British chain, possession of which gives control of a combined total of nearly six hundred of Britain's five thousand cinemas, though, at the time of writing, 20th Century-Fox, the famous American undertaking, still holds a substantial interest in the Gaumont-British holding company—the Metro-polis and Bradford Trust.

The combined balance-sheet total of the Ostrer and Maxwell interests is more than twenty-four millions sterling. Even the man in the street, therefore, is interested to see whether Britain's cinemas will now become 'all British' or whether American interests will continue to have such a large say in the matter of his movie fare. This much is certain—the negotiations represent the biggest cinema deal ever envisaged in this country.

This is a long digression from D. W. Griffith and "The Birth of a Nation," but not quite so remote as, at first glance, it would appear. All the pieces of the cinema's history fit into one another with the precision of a jig-saw puzzle, if only one has the patience to find which squiggly edge interlocks with which squiggly edge.

It was "The Birth of a Nation" which laid the foundations of the *real* cinemas—better-class halls which were to form the groundwork of such circuits as P. C. T., for "The Birth of a Nation" marked the breaking down of social barriers; its Press notices—for the Press simply had to notice it, in spite of deeply-

rooted prejudice against the pictures—piqued the curiosity of those who had never been in a cinema before.

The length of the film made it imperative that the picture be shown continuously or with possibly one interval in the middle. Up to that time few cinemas boasted more than one projector, so that, if a film ran to more than one reel, it was customary to throw a slide on the screen at the termination of the first reel requesting, "Two minutes, please, for the operator to change the spools."

The two minutes usually lengthened into five, or even longer if the operator had any difficulty in threading the second spool through the machine. It was not uncommon, too, for the projector to be hand-turned throughout the show, no mean feat when one remembers that the operator usually had only a boy to assist him and that the theatre opened at 2 p.m. and showed pictures continuously until 11.

"The Birth of a Nation" and other multiple reel films made it necessary to install a second or even a third machine. Modern cinemas boast three or four projectors and though productions embrace seven or eight reels and the standard length of each does not exceed 1,100 feet, necessitating six or seven change-overs from one machine to another during the unfolding of the story, it is seldom the public is aware when a machine stops and the one by its side takes up the task of unwinding the drama.

If "The Birth of a Nation" brought slow but sure changes to the cinema theatres, it played a no less

important part in creating an upheaval in the producing end of the business.

At first there was a tendency for all producers, both large and small, to rush wildly ahead with so-called 'super'-productions embracing any and every kind of theme drawn out to inordinate length and many producers retired from the film business with several thousand feet of unwanted film negative on their badly-burned hands. But the film industry, which had found its feet long before, suddenly acquired a sense of its own importance. For years it had looked up to the stage as a poor relation looks up to a rich relative. In a slightly modified form, that frame of mind persisted until the advent of the talkies, when the economic superiority of the moving picture medium as an instrument for providing drama with dialogue gave the stage a blow from which there is little likelihood of its recovering, a blow which sent legitimate stage actors cap in hand to seek work in the sound-proof studios of London and Hollywood. Then, and only then, did the head men of film-land realise that the stage's attitude of superiority was largely a pose and that actors almost without exception are so human as to put art for art's sake and other clichés of the pseudo-intellectuals conveniently into airtight compartments when attractive contracts are put before them. The film folk still have a sneaking respect and regard for folk of the legitimate theatre which they would not care to own to publicly; the theatre has a man named William Shakespeare, who laid down the tenets of good drama back in Queen Elizabeth's reign, whereas the cinema can only boast (when it remembers

him at all) D. W. Griffith, and he didn't appear on the cinema scene until 1908. Besides, he is still alive and can't 'of course' be regarded in any way the equal of the producer and author of the *Globe*, *Bankside*, but in a hundred years or two hundred years perhaps D. W. Griffith . . . ?

The cinema had become so popular as far back as the end of 1908 that Mr. McClellan, Mayor of New York, withdrew the licences of forty-five cinemas in that city because 'everyone had gone moving picture mad.' It was then estimated that a quarter of a million people in New York went to the pictures every day. While, in London, in 1910, the cinema had hit variety badly, the Shepherd's Bush Empire giving cinema performances every afternoon, the tickets admitting the holder free to the evening variety performance.

Needless to say, the New York picture houses soon opened their doors again; but the success of the cinema in those days was small compared with the boom of "The Birth of a Nation" era.

Hollywood, Los Angeles, and Culver City became the home of one of the biggest industries in the United States. A few of the older companies still clung to their native homes, Vitagraph remaining in Brooklyn, Essanay in Chicago, and Lubin in Philadelphia, but it would be too sweeping to assert that they did not hear California's call and make productions in Los Angeles and Hollywood.

The cinema business has always built a fence round the truth about itself and, at the same time, thrown wide the doors to let out a never-ending flow of publicity

ballyhoo. At a time when stars were granting interviews to the representatives of the fan magazines which were then springing into existence and giving the carefully-nurtured impression that a film star's life, both before the cameras and in the privacy of the home, was steeped in dignity and affluence, a motion picture player who boasted an automobile was regarded as 'high hat' and 'upstage' by his fellow-artists, who knew that nine stars out of ten rode to location in the studio bus along with the stage crew and prop men.

"I want to give the public something finer and better," was the gist of these interviews. "After my work in the studio is finished for the day I like nothing better than to spend an hour curled up before the fire in my little bungalow with a volume of Keats or Shelley," or—"My wife [or husband, or mother] is my severest critic,"—this was the kind of thing which the publicity departments poured out in torrents to the fan magazines month after month. Desperately, almost piteously, studios fostered the illusion that the film star was a refined, cultured, aspiring artist (usually spelt with an 'e'). The illusion was created, too, that the film star was a pampered darling surrounded by luxury, a library and other evidences of good taste. They omitted to mention that most of the stars lived in apartment-houses and, being ex-ranch girls, stenographers, waitresses and shop assistants, could not have read Shelley or Keats or Browning, no matter how long they curled up before the hot-water radiators in their fourth-floor apartment-house sitting-rooms, and that anyone, let alone a husband or mother, who dared to criticise

a star's performances was likely to get 'a sock on the nose.'

Let us take a look at the Hollywood of those rip-roaring days when the uncrowned kings and queens of moviedom came down the streets of a morning, with overcoats over their pyjamas, to get bottles of milk and morning papers from the corner drug stores and the few who really did boast automobiles spent most of their leisure (in between authorising statements to the Press that they lived for their art alone) trying to get the local garages to jack up back axles and fit new tyres, what time they blasphemed at the six-inch pot-holes in the cart-track roads which led to the sprawling movie towns where they earned—not the thousands of dollars a week of the publicity departments' fevered and overworked imaginations—but anything from twenty-five to two hundred dollars according to how green they had been when the front office at the studio had persuaded them to sign a long-term contract.

Casting was carried on in the bar of the Alexandria Hotel then. Five o'clock was the recognised hour for cocktails, baked ham in hot rolls and the allocation of parts. Everyone who happened to be disengaged made for the Alexandria and tried to catch the eye of a director. It was the centre of the movie folks' social world. Everyone thought, talked and lived movies; outside of the Alexandria bar and Los Angeles the world did not exist for the men and women of shadowland.

The Hollywood Hotel was a step higher in the social scale; Thursday nights there saw a dance at which all the leaders of the movie colony, even including the Pick-

fords, could be seen enjoying themselves after a hard day at the studios.

Most of the studios of that era are ghost-ridden derelicts to-day—memorials to a decade and age when silence ruled the screen and all sorts of ruses were resorted to to get the film 'in the can.' Those ghostly old piles could tell incredible stories, such as the one about the prominent cowboy star who, making two films simultaneously, quarrelled with the studio and went to another producer before his pictures were completed. The luckless film editor was given the two half-finished negatives and told to make one story of them. Several characters who appeared in negative number one had no counterparts in the second story, so, with the aid of subtitles to the effect that 'Pete decides to blow up the mine' and thirty or forty feet of a model being blown sky-high, he managed to dispose of half his characters by the end of the first reel. Even 'Pete' himself had to be killed off a few feet farther on, as there were no more scenes in which he appeared with the star, so 'Pete's' back had the honour of a close-up and his shirt was pierced by a dagger which, a sub-title informed the audience, was 'wielded by an unknown hand.' Sweet were the uses of the sub-title. So well indeed did the editor do his job that the film proved a great success.

Then there is the story about the ingenious producer who, short of capital and tormented by the gigantic scenes his rivals were erecting, built a set of a street in perspective and employed little children, at half the price then paid for the services of adult 'extras,' to play at keeping shops and scrubbing doorsteps in the back-

ground, attiring them in trousers or skirts and giving the boys cigars and cigarettes to smoke. The foreground was peopled with adults, then, behind them, the children were carefully graded according to size right down to the toddlers in front of the last, diminutive house. Few people seeing the scene on the screen guessed that the 'men and women' hurrying about their business far down the street were infants only twenty or thirty yards distant from the camera. There have been plenty of sets built in perspective since, but to this ingenious producer, who shall be nameless, goes the credit of using players in perspective!

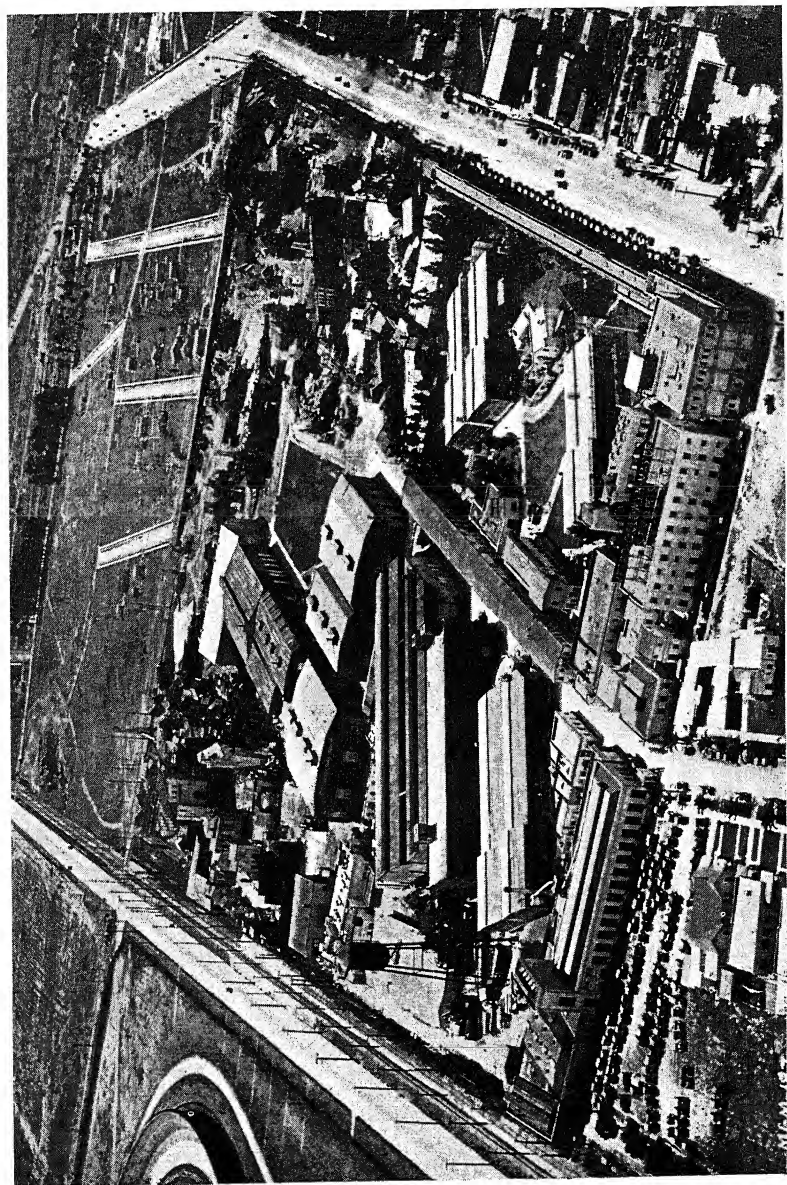
The old Lasky barn is now a staff gymnasium in the grounds of the great Paramount studios. Electricians and carpenters spend a few minutes on the horizontal bars to loosen up their muscles for the day's work where Cecil De Mille made "The Squaw Man" with the aid of a couple of theatrical back cloths and a set of stage wings in the first days of the new gold rush. Mention of the old Lasky barn conjures up memories, too, of the Lasky studio which came later, where the autograph-hunters used to hang round the gates to snatch a prized signature from Wallace Reid, Valentino, Roscoe Arbuckle, William S. Hart, Billie Burke, or Mary Miles Minter.

Then there was the old Triangle studio which afterwards became the home of Samuel Goldwyn and to-day houses Metro-Goldwyn-Mayer. In those days it was beyond the outposts of civilisation. Many an early rising and aspiring film actor had to get there by walking to a cross-roads and waiting for a milk cart.

Triangle had for its three angles Thomas H. Ince, Mack Sennett and D. W. Griffith. They decided to join forces, an experiment which did not last very long, Griffith later linking up with Chaplin, Mary Pickford and Douglas Fairbanks in the formation of United Artists. Gloria Swanson got her first big chance at Triangle, having sprung into prominence in Sennett's Keystone comedies. Her first starring vehicle was "Hear no Evil, See no Evil, Speak no Evil"—quite a snappy title as things went in those days. She was soon snapped up by Cecil De Mille and joined Paramount organisation, where, believe it or not, Texas Guinan was then playing "Sweet Nell of the Ranch" parts in real two-fisted Westerns. Years after, when Gloria returned from a trip to Europe with a marquis for a husband, the mob actually strewed roses before the wheels of her car as it rolled down Vine Street.

Before we pass on, let us raise our hats to this tradition-soaked studio, the only one, surely, that can claim the distinction of having turned out a forty-eight-reel picture, "Greed," a picturisation of Frank Norris's fine book *McTeague*, which Erich von Stroheim made into an equally fine film with Gibson Gowland and Zasu Pitts in the leading parts. Alas, the cinema was not ready for a picture which took some eleven hours to show and Stroheim's masterpiece was cut to eight reels and is consequently all but forgotten except by the cinemas' intellectuals.

Out in the suburb of Edendale was the Keystone studio, founded by Mack Sennett, who graduated as a comedy director under the tutelage of Griffith at the



—Courtesy M.G.M.

old American Biograph studio in New York. Sennett started life as a boiler-maker, got the idea into his head that he was a budding Caruso and had his voice trained. He obtained parts in several touring shows, and finally landed, a 'silent' actor, in the Biograph studio at fifteen shillings a day.

His first part entailed grabbing the heroine and tying her up to a papier-mâché tree. He came through with flying colours—not so much for the zest with which he did the dirty work, but because he didn't break up the valuable property tree in his excitement. But his ideas of comedy did not coincide with those of the Biograph Company, and so Keystone comedies came into being. At that time British and French film-makers had discovered that the chase *motif* was a sure laugh-raiser. Sennett argued that the chase would be funnier if it were made more elaborate, so he introduced a reason for the chase, endowed the 'chased' with character, and added dogs, donkeys and policemen to the chasers. In one of his early films a policeman fell into a bucket of whitewash and then slipped in the mud; the audience howled, the kids especially being delighted to see law and order getting the worst of it. To Sennett it naturally followed that if one policeman was funny a whole band of policemen would be funnier, so the Keystone Police was organised. Dozens of famous comedians graduated in the mythical Keystone police station. Harold Lloyd was one—and Ford Sterling, Hank Mann, Ben Turpin, Roscoe Arbuckle, Al St. John and Edgar Kennedy were others.

Sennett's backers were Adam Kessle and Charlie

Bauman, two bookmakers who, because the Law threatened a general legislative ban on bookmaking on the American race-courses, turned to films. Keystone originally consisted of Mabel Normand, Freddie Mace, and Alice Devonport. These four toiled hard and long to make comedies with speed and laughs. Their first picture was "Cohen at Coney Island." Those were the days when the public park, the street-car and the corner drug store served as backgrounds for their fooling. The actors had to know film-making from A to Z; they carried the reflectors, helped the camera-man with his cans of negative when they boarded street-cars, and kept one eye on park-keepers and policemen likely to order them to move on. It was in that now forgotten studio that Charlie Chaplin made his early successes and his first full-length film, "Tilly's Punctured Romance," in which Marie Dressler played the lead, with Charlie in support. Harry Langdon, Louise Fazenda, Phyllis Haver, Marie Prevost, Carole Lombard, Sally Eilers, Marian Nixon, and Raymond Hatton, Ben Turpin and Charles Murray, all did great work in this studio, that held more than a touch of Mack Sennett's native Ireland. It is said that Sennett's hobby was the rearing of pigs and that they often got mixed up with the actors on the 'lot.'

Two tragic shadows emerged from the old fun factory—Roscoe Arbuckle and Mabel Normand. The former was acquitted by the Law on a charge of murder, but not by the women's clubs and institutes of America, who refused to countenance his appearance on the screen again. Arbuckle and his loyal friends tried in

every way to get the ban lifted; one at least spent thousands he could ill afford on gathering every shred of evidence to prove Arbuckle's innocence to even the most sceptical. But it was all in vain.

Arbuckle made a minor come-back in the studios as a director of comedy shorts, under the name of William Goodrich, but he only appeared once again on the screen, in a 'bit' in "Hollywood Speaks," in which he passed entirely unnoticed by his persecutors!

Perhaps the most homely memory the ordinary dwellers in the motion picture colony will have of him is as a smiling, good-natured 'fat boy,' with a car almost as long as a bus, fitted with an ice-box from which he regaled himself with sundaes against the heat of the day.

Mabel Normand's tragic story needs no recounting, but there is one anecdote anent her generosity and wilfulness that well bears retelling. Once when she was off to Europe she was so overcome by the send-off her friends accorded her that, on the spur of the moment, she hustled them on board and took them all with her, unable to part from them. She paid all expenses and, when she returned and found some of her friends who hadn't gone to see her off were peeved at having missed a good thing, she made the trip all over again, taking them with her.

It was on the Sennett 'lot' that the custard-pie came into its own and remained supreme for many years. There was a touch of Irish sentiment, too, in the fact that the last film made in the old studio was called "The Good-bye Kiss." Sennett moved into a brand-

new studio in the San Fernando valley a few years ago, leaving the old plant a derelict manufactory of movie memories.

I recently lunched with him in his spacious Park Lane apartment, when he told me something of his plans for making comedies in this country, plans which, as it happens, never came to anything much.

He was leaning far out of a sun-veranda as I entered, watching little Princess Elizabeth at play in a private garden below. Fresh from the land of gangsterdom he was amazed that the 'little girl who might one day be Queen of England,' as he phrased it, could thus play with no other protection than that of a nurse and the casual glance of a passing policeman.

"That couldn't happen in any other country in the world," he insisted. "In America there would be motorcycle cops surrounding that plot and a machine-gun at each corner."

It took some time to draw him away from the astonishing spectacle.

Tall, heavily-built, with snow-white hair and bushy jet-black brows, he is an impressive figure, yet, though he has 'made' countless beautiful screen stars and many world-famous comedians, he is not only indifferent to the fact that the world regards him as a screen force, but is seemingly unaware that there is anything at all remarkable about his discoveries. In fact, we spent a considerable time discussing—not Gloria Swanson or Charles Chaplin—but the merits and demerits of various brands of English sauces, English radio programmes and the English monetary system before I

could get him on the subject of movies at all.

"Lloyd Hamilton was the funniest comedian who ever worked for me," he averred at last; "he didn't have to be funny, he was just plum naturally funny."

He has no illusions as to the fate of the custard-pie comedy which made him famous. Lounging restlessly on the arm of a chair and wearing nothing but a blue shirt—open as to the neck and chest—a pair of trousers and slippers—no socks—I can see him quite clearly expounding the theory that the cartoons of Walt Disney and similar artists had queered the slapstick market. "They can do things I can't do," he admitted candidly. "Mickey Mouse defies the law of gravity—no comedian can do that. Then the Big Bad Wolf is made to fall down a chimney on to a cauldron of boiling turpentine and get up and run off with his hindquarters on fire. I couldn't possibly introduce such a thing into a real life comedy.

"As for the bathing beauties, what's the good of putting them on the screen when you can see all the feminine charms you want on any bathing beach and in costumes the censors wouldn't allow us to put on the screen?"

If this sounds like the diatribe of a disgruntled man, it isn't meant to. The past to him no longer matters, is no longer important. It is over. He was full of some little comedian he had seen in a restaurant cabaret the previous evening. I gathered that if all went well, this man is going to be greater than Chaplin. One day we shall see.

Even as I left, he was listening eagerly to the tale of

a talent scout who had burst in on us full of a genius of a minstrel found on Bognor sands.

Mack Sennett, I imagine, is typical of scores of other pioneers. He helped to make movie history, but is blissfully unaware of it. Yesterday is over; it is to-morrow that matters. He has been 'in pictures' ever since those far-off days at Biograph and the piano sale-room-cum-studio, and probably he has all but forgotten when there were no movies.

What do we know of the players who produced the first Elizabethan dramas? Their work marked a new phase in entertainment. Men like Sennett initiated another and more far-reaching phase, yet they are blissfully unaware, as probably were the casts of Shakespeare's plays, that they had cast a bell, as it were, the peals of which would go echoing down the corridors of time.

Sennett would probably get the shock of his life if he could only glimpse how posterity will view him and all his contemporaries.

But to return to Hollywood.

A visitor to Hollywood to-day passes scores of buildings now turned over to commercial use without realising that they once housed the famous film stars of yester-year. The Selig Zoo, now a pleasure park, is all that remains of the old Selig Polyscope Company's studio, where Kathlyn Williams made movie history in "The Adventures of Kathleen," aided and abetted by sundry elephants, panthers, lions and monkeys. The first Selig 'zoo' picture was "Big-Game Hunting in Africa," released in 1909. Trained lions were used in



KATHLYN WILLIAMS IN "THE LEOPARD'S FOUNDLING," AN EARLY SELIG "ZOO" PICTURE



THE CUSTARD PIE TRIES TO SURVIVE THE COMING OF THE TALKIES. MACK SENNETT'S "HOLLYWOOD THEME SONG," PRODUCED IN 1930

the make-believe jungle, but the picture was regarded as authentic even in Africa.

The high ship's mast that used to tower over Charles Ray's studio on Sunset Boulevard has been dismantled and the studio given over now to a firm of scenery contractors. For many years the mast was a mute memorial to Charles Ray's biggest failure, "The Courtship of Miles Standish," in which he tried to break away from the rural roles for which he was famed by appearing as a sophisticate. He placed every penny he possessed in the picture and lost the lot, but the night before Hollywood knew of the impending crash, Ray 'threw' a party the like of which has never been seen before or since in Hollywood; it is still spoken of to-day in tones of awe.

Ray, now climbing back again, must surely smile at Hollywood's ironies. In the days when Ray's house was one of the show-places of the film colony—there were solid gold fittings in the bathroom, and at dinner a footman stood behind the chair of every guest—he imported the first English butler into Hollywood. The other stars used to sneak up, ring the front-door bell and then hide in the bushes, all for the sake of seeing that 'curiosity,' the English butler, open the door.

Following the crash, the English butler departed. Ray disappeared from the screens. Then, recently, he made his 'come-back' in a small part in "Ladies Should Listen," and now it is Charles Ray's turn to provide amusement in the same manner by playing light comedy doorman in a fashionable French hotel.

Twenty years ago there was a dusty road that led

out to Santa Monica—at least, it was dusty in the hot weather, but impassable with mud after heavy rains. It was then some distance beyond the end of the tram-line, but that did not deter Thomas H. Ince building Inceville. John Gilbert, William S. Hart and Billie Burke all made pictures there under the Thomas H. Ince banner. All that remains to-day of the once humming studio is a forgotten little lath-and-plaster church built on the hill-side.

And so it is with the rest of Hollywood; the old 'lots' have either given way to the new sound-proof studios or have been built over by enterprising real estate dealers.

Here are glimpses of one or two scripts from which typical Hollywood pictures were being made in 1914. Here is a scene (No. 115) from "The Woman in Black" (Reel 3):—

"Everett's drawing-room. Everett, Stella, and Crane discovered. Mansfield enters. He asks Everett if it is true that Stella will marry Crane. Everett says 'Yes.' Crane says, 'This girl is going to marry me.' Stella removes her ring and offers it to Mansfield. Mansfield refuses to take it. Stella lets it drop to the floor. Mansfield asks Stella if she loves Crane. Stella in agony of despair says, 'Yes, I love Crane,' goes into Crane's arms, struggling with her revulsion. Mansfield still refusing to believe it, starts to take her out of his arms. Crane springs in front of Mansfield and gloats. Mansfield hurls implications [*sic*] at the head of Crane. Exits."

Lurid melodrama was the order of the day, as this scene from "The Fatal Wedding," a Klaw and Erlanger production, proves:—

"Sub-title: Monday at high noon.

"Scene 177 (interior of church—this may be made as elaborate as possible).

"Spectators and guests entering. Bridget enters—looks about—takes seat in pew. Howard and Cora enter, up to rail, minister at back. Curtis, slightly drunk and dishevelled, takes seat at end of pew in front of Bridget. He does not see her; she watches him. The ceremony begins, commotion at rear of church—Toto rushes in with Mabel—"Stop! Stop!" As Toto approaches altar, Curtis rises—"There's the cur!" Points revolver and, as he fires, Bridget leaps up and seizes his arm—his aim is thrown off and the bullet hits Cora, who sinks to the floor. Mabel has handed paper to Howard. Guests have seized Curtis. The minister raises Cora's head. She confesses, dies. Mabel in Howard's arms. Jessie between them. End."

But during the later War years, whilst Britain suffered a severe blow to its film business, Hollywood productions made surprising strides from the crudities of 1914, and, with the better quality of the productions, more and more stars came into prominence. Even the present generation of film-goers is familiar with the stars of that period, though to many their names are

little more than legends. John Bunny and Flora Finch were the outstanding comedy team of that day. Bunny was a fat man with a funny face. He was standing at the casting window of the old Vitagraph studio at Flatbush one day, waiting in a crowd on the off-chance of getting extra work when one of the Vitagraph executives put his head out of a window above and spotted him. Vitagraph badly wanted a funny man in order to keep abreast with its rivals, and so, almost overnight, Bunny, the extra of yesterday, was promoted to stardom, and Flora Finch, who specialised in scraggy but amorous old maids and who was yet another graduate from the rough-and-tumble school of American Biograph, made a perfect foil. Maurice Costello, father of Dolores Costello, was then the most popular American leading man on the screens of the world. He, too, was a Vitagraph star, and made history by refusing to paint scenery. "I'm an actor, not a scene-painter," he insisted. It was rank insubordination, but he won the day, and all other film stars owe him a debt of gratitude. He raised the status of their calling.

His biggest rival at that time was Francis X. Bushman, star of the Essanay Company's films, for whom he appeared in more than two hundred pictures, his biggest success being an eight-reel version of "Romeo and Juliet," produced in 1915. And there was Mary Miles Minter, Mary Pickford's biggest rival, who started life as Juliet Shelby; at eight years of age she actually owned her own touring company and went on the road with a Civil War melodrama, "The Littlest Rebel." At twelve she was playing leads in films and



—*Courtesy British Film Institute.*

JOHN BUNNY IN "PICKWICK," AMERICAN VITAGRAPH PICTURE
MADE IN ENGLAND IN 1912



—*Courtesy Paramount.*

HAROLD LLOYD

became, after only a few years, one of the biggest box-office attractions in the world, a position which she might hold to-day had she not had the misfortune to figure prominently in the gossip which revolved round the death, at the hands of an unknown assassin, of William D. Taylor, a film producer.

About this time, a new word came into the film publicity man's vocabulary—vamp. Short for vampire, it originally designated Theda Bara, who came into sudden prominence in the leading part in a screen version of Kipling's poem, "The Vampire," also produced in 1915. The story was broadcast that Theda Bara was the illegitimate daughter of a French artist and an Arab woman, and had been born in the Sahara! As if in proof of this amazing fiction, it was stated that her surname, Bara, was Arab spelled backwards. In publicity photographs, she was depicted crouching, her head cradled in her palms, over the skeletons of men. The secrets of crystal-gazing were an open book to her; she had supernatural powers and an uncanny fascination over men, it was said. For several years these fibs were assimilated by the public, and Theda was looked upon as a reincarnation of a sorceress of old. But truth must out, and Miss Bara's real name turned out to be Theodosia Goodman. And as for the Sahara legend, she was actually born in Cincinnati, Ohio, and had played many perfectly ordinary small parts with the Pathé Company under the name of De Coppit before being discovered as a 'vamp.'

To-day, wife of Charles Brabin, the film director, she is prominent as a social leader in the picture colony.

Who can forget the Gishes, Nazimova (who strode up and down Sunset Boulevard every afternoon clad in bright yellow pyjamas), Alice Joyce, or Mr. and Mrs. Sidney Drew, who charmed audiences for several years with their light domestic comedy and who have never had successors? Then there were Marguerite Clark, Betty Compson, Pauline Frederick, and Pearl White, the serial 'Queen,' who started thrilling audiences at the age of thirteen when she was a bareback-rider in a circus and whose name will always be connected with "The Exploits of Elaine," which still remains the most thrilling serial ever produced. Outstanding, too, were William S. Hart, Thomas Meighan, William Farnum, and Wallace Reid, who had a small part in "The Birth of a Nation"—that of the blacksmith—and became one of the most popular stars in the history of the movies, a lovable spendthrift who used to walk into a drug store on Hollywood Boulevard, buy up hundreds of dollars' worth of expensive perfumes and present them to the first girls he met on the sidewalk. His name was linked with tragedy, too, for he died at the age of thirty-three from the effects of drug-taking.

Helen Holmes's name still holds a glamour for those who saw their first pictures in the early days of the War. Helen inherited a ranch in California and learned to ride and shoot and rope a steer just like a regular cowboy, so when the old Kalem Company joined the trek to California, Helen was invited to exhibit her accomplishments before the film cameras; she became known as "The Railway Girl," and was featured in at least one serial, "The Hazards of Helen," in which she

drove fast freight trains, climbed along the roofs of box cars and thought nothing of leaping from a speeding train to a racing car. There was Tom Mix, the greatest cowboy of them all, Agnes Ayres, Priscilla Dean, Dorothy Dalton, and delightful Norma Talmadge, who got her first part through wandering into a studio when she should have been buying pillow-slips for her mother. She was only fourteen, and had been given a shilling to make the purchases, but spent the money on tram fares to the studio instead, so great was the call of the movies.

Harold Lloyd's advent in pictures was also due more or less to chance. His father won a lawsuit and received several hundred pounds, and decided to give his son the opportunity to find his feet as an actor. Young Harold joined a stock company in San Diego, and filled in his spare time working for Edison and other film companies. His very first part was that of an Indian in a Spanish fiesta scene. After that he tried his luck with Universal, and got into the studio by a typical comedy gag—he donned make-up and an outlandish costume and marched in with the rest of the players when the lunch-hour was over. He became friendly with Hal Roach, who, playing in Westerns, had an ambition to direct his own pictures. Some time after, Roach came into a legacy and offered Lloyd ten pounds a week if he would join him in making films. They made comedies and Westerns alternately, Lloyd playing in the former as "Winkle" or "Willie Work." For the latter character he donned a long frock-coat with padded shoulders, a battered top-hat and big shoes and

a little moustache of the kind known as 'a football match' (eleven each side) in an endeavour to get away from Chaplin's make-up, which all screen comedians were then copying. Roy Stuart played the leads in the Westerns with Lloyd in support as heavy fathers or sheriffs; sometimes he played as many as three parts in one film. "Willie Work" did not prove popular, and Lloyd altered his characterisation to "Lonesome Luke," for which he donned tight trousers, a still tighter coat and a diminutive hat, Lloyd still being determined not to follow the footsteps of other comedians. The unit used the old Bradbury mansion in Los Angeles, now a home for old people, as a studio. Films had been produced there ever since the trek to the coast had reached California, two or three companies usually working in the house at once. It boasted a magnificent carved staircase, and no producer missed the opportunity of bringing it into a picture by hook or by crook—it was far too valuable a 'prop' to be overlooked. After a time, the staircase appeared in so many films that audiences grew sick and tired of seeing it, whilst the staircase itself grew, so the actors said, decidedly up-stage and contrived to steal every scene in which it appeared.

"Lonesome Luke" gave way eventually to the spectacled character with which everyone is familiar to-day, but the producers experienced the utmost difficulty in persuading the distributors that the new characterisation was superior to the "Lonesome Luke" of old.

Harold Lloyd does not wear his famous glasses in real life, notwithstanding the injury his eyesight

suffered a few years ago when a trick bomb blew up prematurely in the studio.

Bebe Daniels has reason to remember "Lonesome Luke" with affection, for it was in these Hal Roach comedies that she obtained her first foothold on the ladder. She was only fourteen at the time (few stars, Mary Pickford, Mary Miles Minter, the Gishes, were little more than children), but had already sent out photographs to all the casting directors. Roach's manager was instructed to find Lloyd a leading lady; going through the files, he lighted on Bebe Daniels's picture, and rang her up and asked her to call at the studio. Bebe was overjoyed, but felt certain that when the film people saw her and realised how young she was, they would laugh at the idea of giving her the part. Accordingly she made a hasty collection of clothes from her grown-up relatives and put up her hair and hastened to keep the appointment. The manager looked her over and shook his head disappointedly. "I'm afraid you're much older than we expected, Miss Daniels. I can't offer you the part." Bebe was so disappointed that she burst into tears, which was about the best thing she could have done, for her coiffure gave way under the strain and, as her hair came tumbling down, her true age was only too apparent, and Bebe Daniels became Lloyd's leading lady.

Charlie Chaplin's rise to fame is too well known to need recounting, but as this section is reminiscent, it is not out of place to recall that Chaplin is probably the only film star who can boast that he was nearly the

cause of another war. Japanese conspirators planned to murder him during his visit to Tokio in order to bring about a war between the United States and Japan. The conspirators, when brought to justice, revealed that they planned to bomb the house in which a reception to Chaplin was to be held. Fortunately their plot came to nought, for, at the last moment, the proposed reception was cancelled.

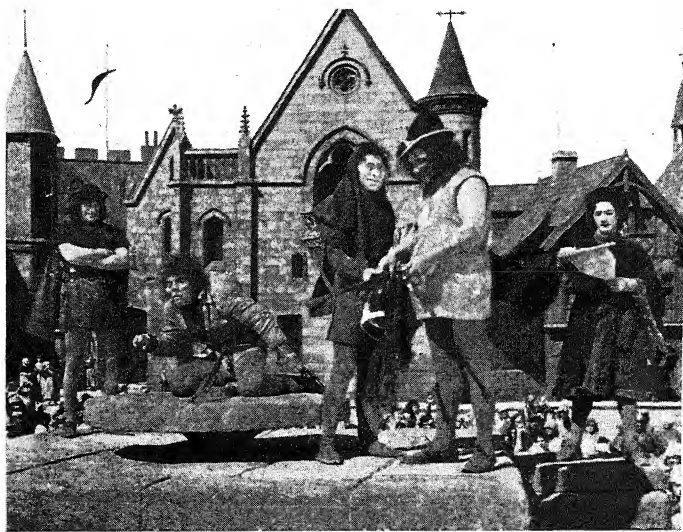
Erich von Stroheim, who arrived in Hollywood via the Austrian cavalry, the Imperial Palace Guard at Vienna, selling fly-papers, shovelling mud and hawking post-cards, was, so it is alleged, almost the cause of a war of a different kind. Stroheim's extravagant methods of production and the consequent squabbles with his employers are notorious, but, it is said, he once planned to end one such dispute by mobilising his stage crew and extras into a revolutionary army and seizing Universal City by force! Even if the story is not true, its fabled ending is a charming one. Mrs. Stroheim, learning of the proposed insurrection, gently pointed out to her seething husband that such things are simply not done in the United States, and Stroheim sheepishly capitulated.

Universal City provides another good story. That fine trouser, Lon Chaney, before making his début as a movie actor in 1912, had been many things—electrician, scene-shifter and 'prop-rustler.' He was a member of the stage hands' trade union to the day of his death, and was proud of his 'card.' One day he asked for a salary of twenty dollars a week. It was refused. "One day you'll be glad to pay me that twenty



—*Courtesy Universal.*

ERICH VON STROHEIM IN "FOOLISH WIVES," PRODUCED IN 1922



—*Courtesy Universal.*

THE LATE LON CHANEY IN "THE HUNCHBACK OF NOTRE DAME"

dollars," Chaney predicted. They laughed at him. Years later he was asked to sign the contract for his appearance in "The Hunchback of Notre-Dame." The figure was a nice round one, say a thousand dollars a week. Lon picked up the pen and, before signing, altered the figure to one thousand and twenty. The executives chuckled at this whim. "What's the idea?" they laughed. "That," said Lon grimly, "is the twenty dollars a week I said you'd be glad to pay me one day!"

Tragedy as well as comedy often stalked the studios at the time the American film business was going through its formative period between the immaturity of the single reel flicker and the mammoth super-picture which only went into the discard when talkies arrived.

The millionaire dying of starvation is a commonplace of fiction, but it would take a courageous novelist to put on paper the real life drama which beset Sigmund Lubin, one of the earliest of all the picture pioneers.

While other producers were snapping up stars, Lubin was snapping up stories. No doubt he thought that the supply of the former was inexhaustible, and it was foolhardy to try and corner the market in an endeavour to get ahead of one's competitors, but masterpieces of fiction were a different matter. Great story-tellers were not born every day. So, according to a story still current in Hollywood, Lubin spent every penny of his capital buying up more and more stories. Then he awoke one day to the fact that he had no money left with which to produce them.

In his empty, cavernous studio he roamed alone planning the great pictures he would produce from the great stories he had bought. But he never did produce them. Never a camera turned on them. He had cornered the market, only to find himself cornered in turn.

One could go on recounting stories of the 'good old days' for ever, days when unfledged girls might become famous overnight by a fluke, and men, with culture, refinement and artistic ambition, almost inevitably found themselves on the outside fringe of things; 'good old days' when the studios from one end of Hollywood to the other twice closed down and paid off their staffs because of over-production, days when several apartment houses in Los Angeles displayed the chilling sign: "No Dogs or Movie Actors Taken."

In Britain the film business was in none too flourishing a state; the War had hit the studios badly, and only a few managed to keep going. Hepworth's flourished and so did the newly formed London Film Company, which, under American guidance, made "London Pride," "Quinneys," "Jelf's," and "The Prisoner of Zenda," with Henry Ainley, Mary Dibley, Frank Stanmore and Elizabeth Risdon, while G. B. Samuelson at his studio at Worton Hall, Isleworth, produced "The Dop Doctor," "The Game of Life" (a forerunner of "Cavalcade"), "A Study in Scarlet," and several more worthwhile pictures. The official War films—"The Battle of the Somme," "The Tanks in Action," and "The Battle of the Ancre," played a prominent part on the screens of the nation's cinemas during the latter

days of the War. They constituted the only authentic record of modern warfare, and are now held in trust by the nation for the historians of the future. Splendid work, too, was done by Sir William Jury, who organised the supply of films to the camp and battleship cinemas which came rapidly into existence for the relaxation of the men of the fighting services. His was a labour of love, and one made doubly hard by war-time restrictions. To their credit, scores of film companies co-operated in the work, supplying prints of their films, which they knew would be knocking about 'somewhere in France' for months on end and which would not be worth the celluloid they were printed on after the rough handling inseparable from war-time conditions. Thousands of men owe a debt of gratitude to the unflagging work which Sir William Jury put into his uphill task.

Surprisingly enough, the period did not produce any great war films in this country, nothing comparable with the French "J'Accuse!" or the American film, "The Battle Cry of Peace," featuring Norma Talmadge, which, produced by Vitagraph before America's entry into the War, was, so its sponsors proudly proclaimed, instrumental in bringing about President Wilson's decision to enter the War, a statement so ambiguous that it would, in more normal and cynical times, undoubtedly have rebounded on the heads of its originators.

Incidentally, Trotsky is said to have appeared in it—as an 'extra.'

The British and Colonial production "Twelve Ten,"

which Herbert Brenon directed at Walthamstow with Marie Doro in the lead, was one of Britain's few really big successes of the period, possibly equalled only by Hepworth's "Alf's Button" and, later, "Comin' Through the Rye."

In 1922, the first British serial film appeared—"The Great London Mystery," starring Lady Doris Stapleton and David Devant, the illusionist.

On the Continent several French film companies disappeared entirely in the aftermath of the War, but in Germany the position was more encouraging. Cut off from normal supplies, Germany laid the foundations of a small but 'intellectual' film-producing business. Post-war youth, jobless and all but hopeless, turned to the new and flourishing cinema to find an outlet for all the things it wanted to express. The film gave greater freedom than the stage, and so "The Cabinet of Dr. Caligari" and "Warning Shadows" laid the foundation-stones for "Dr. Mabuse—the Great Unknown," "The Nibelungs," "Vaudeville," "The Last Laugh," and, later still, "Metropolis" and "The Blue Angel."

The ten years following the end of the War can best be described as 'the middle period'—the more or less lucid interval between the crudities of the earliest films and the first immature talkies. Despite the miles and miles of mediocre stuff which Hollywood ground out during that period, it gave us some fine imaginative flights—"The Lost World" and "Peter Pan" among them, as well as a few fine historical romances such as "Orphans of the Storm," "The Covered Wagon" (starring Mary Miles Minter and the most expensive picture

ever produced—it cost one million sterling!), “Scaramouche” and “Ben Hur”—all tremendous box-office hits. There were one or two dashing pictures of the always worthwhile Fairbanks school—“Robin Hood” and “The Thief of Bagdad,” and some characteristic productions in the De Mille genre such as “The Ten Commandments.” Chaplin’s never-to-be-forgotten “Woman of Paris” was a film which made history; despite its poor story, it called down the plaudits of the intelligentsia for breaking the chains which had hitherto held the cinema to the old-time melodrama tradition that all villains must be black ‘all through’ and all ‘fallen women’ beyond the sympathy or even interest of more conventional people. Of course, there were the usual excursions into the realm of sheer melodrama—“Foolish Wives” and “Enemies of Women,” “The Merry-Go-Round,” “Way Down East” and “He Who Gets Slapped,” as well as one or two not quite convincing War films, “The Four Horsemen of the Apocalypse” and “What Price Glory,” as well as one quite convincing one, “The Big Parade,” which, if it had not been so American in tone, would have been hailed by the other nations as the first real film of the War. The sentimentalists, of which I must admit I am one, enjoyed “Seventh Heaven,” “Beau Geste,” “Tess of the Storm Country,” “Tol’able David,” “Smilin’ Thru,” and “Over the Hill,” while the downright sensation-seekers were given their fill with “The Sheik” and “Manslaughter.”

Such were the outstanding films of an outstanding period, a time when America dominated the film

market of the world by its block booking system, a practice which made it possible for a producer to sell his goods long before he had produced them and compelled the consumer to buy something he did not want. In other words, America sold its pictures in groups—a half-dozen or a dozen at a time. The luckless cinema manager who wanted to get the best Hollywood pictures had to sign a contract which, in effect, landed him with a 'block' which included one or two worthwhile films and several distinctly inferior ones. In this way Hollywood got rid of its second-rate pictures at enhanced prices. Some of the films included in the 'blocks' were so bad that, even having paid for them, the managers of the better-class halls did not show them, so fearful were they of losing patronage if they put such junk on the screen.

The renters had things all their own way; they had the big names, the top-line stars, and knew that the cinemas could not carry on without them. Block booking grew to such proportions, managers being coerced into signing long-term contracts, that it was impossible for good British pictures—and there were a few—to get a showing until months, even years, after they had been made, by which time they were hopelessly out of date and presented no serious rivalry to the American output.

A group of men, interested in the future of British pictures, got together and formulated a plan whereby Parliamentary aid was to be sought in giving British pictures a fair deal. Popularly called the Quota Act, it was designed to make the showing of an increasing

proportion of British pictures compulsory by law.

The authors of the plan were George Ridgewell, a British film director who made more than two hundred pictures in his time, Captain Rex Davis, a popular screen 'hero' of silent pictures and a member of Parliament, and Victor McLaglen. The plan was first mooted in 1922, but it was not until a year later that their campaign was put into active practice.

They went lobbying M.P.s in the House of Commons, wrote letters and articles in the Press, and held open-air meetings by the Irving Statue outside the Garrick Theatre in Charing Cross Road. It was no unusual sight to see Ridgewell and Victor McLaglen pleading with lunch-hour crowds or workers pausing on their homeward journey to give their support to any measure that would help the cause of British pictures.

It was a tremendous fight. At one period, in 1924, there was not a single British film in production.

But they won through in the end. The British National Film League took up the cause, and Sir Philip Cunliffe-Lister prepared the draft of the legislation which these defenders of the British film were demanding, and, in 1927, the Films Act (or Quota Act, as it is usually called) was placed on the Statute book.

Thanks to George Ridgewell's efforts British films are holding their own on our screens, but when he died a short time ago, few of the millions who patronise the cinema knew of his passing. Even if they had, it is doubtful if his name would have conveyed much to them. He was a born enthusiast for hard-won causes,

generous and warm-hearted, and he made scores of excellent films. From 1910 to 1920 he was in America directing for Edison, Vitagraph, and other companies. On his return he made several pictures for Sir Oswald Stoll at Cricklewood, the finest of which was "Beckett," starring Sir Frank Benson. His long series of two-reel "Sherlock Holmes" pictures, featuring Eille Norwood, will probably be better remembered, however. The Quota Act, however, did not react to Ridgewell's own benefit; in later years he was often hard pressed, and, like so many other picture pioneers, died in circumstances far from affluent.

The Quota Act did not have an easy passage. It was greeted with howls and jeers by an inspired section of Wardour Street, and with wailings and lamentations by scores of Jeremiahs of the Press, who predicted that people would stay away from the cinemas if British pictures were shown.

Nevertheless, the Quota Act succeeded in its purpose. It gave new hope and impetus to native production. In fairness, it should be pointed out, however, that even before its passing, and spasmodic as British production was during the years during which we lost our film trade to America, several worthwhile, not to say box-office record-breaking British pictures, were turned out. During these 'between years,' as we may call them, "Hindle Wakes" and "The Monkey's Paw" scored phenomenal hits. "The Squibs" series in which Betty Balfour figured for the Welsh-Pearson Company, and which marked, almost for the first time, the advent of typically British humour on the screen, is still spoken

of affectionately by people who know their pictures, and what of the all-colour romance, "The Glorious Adventure," which J. Stuart Blackton produced with Lady Diana Manners and Victor McLaglen in the leading roles?

In those same 'between years' there had grown up in America a code which, though it never found its way on paper, governed the making of nine American pictures out of ten. America has always loved formulas, plans for setting down things in black and white or sticking flags in graphs. The unwritten code laid down the rules for box-office success, things which one could get away with at the box office to good effect.

Animals and babies were held in high esteem as sure fire 'sympathy-getters'; bad men, right up to the time of Adolphe Menjou's portrayal in "The Woman of Paris," were never endowed with a sense of humour, let alone a single redeeming feature. Heroines were so incredibly stupid and ingenuous that one wonders how audiences could ever have found them worth getting excited about. And every picture had to have a high spot, whether it was a train wreck, a tenement fire, or an excited outburst in the divorce court.

One film was as good as another, one star as like as another, and film programmes still clung to the principle that one must try at all costs to satisfy the whole of the public the whole of the time, so one had domestic drama, custard-pie comedies, Westerns and news-reels, all crammed into the same programme, the romance to satisfy the lovers in the back row, the Westerns to thrill the kiddies in the fourpennies and

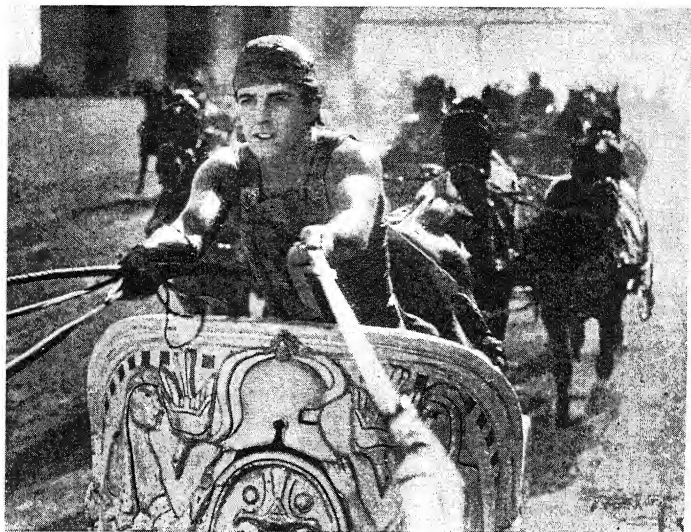
the custard-pies to make, if possible, both sections laugh. The result was over-production. It was a state of things which could not last. We are still a long way off from the specialised cinema to-day, only the 'interest' and news films having found a home of their own, but at least programmes are not so indiscriminately arranged.

During those halcyon days in which Hollywood basked in the beatific reflection of millions of silver dollars, an event of major importance was happening several thousands of miles away which was calculated to change the status of the moving picture as ugly sister of the Arts to one of the most important members of the family. The screen was being given its first really important artist.

It already boasted Chaplin, but he was too controversial an artist to be universally acclaimed. Also, there was the late Rudolph Valentino, the screen's most glamorous exponent of male 'sex menace,' who achieved tremendous prestige with his performances in two or three transient pictures, but whose promising life was cut short before the world had time to see him play a part in a story that was not novelettish.

It was left to a Swedish girl who had been lather-girl in a barber's shop and a rabid admirer of Carl Brisson, leading man at the local theatre in Stockholm, before becoming an actress, to give the film its first player comparable with Bernhardt, Siddons or Duse.

Garbo made her screen début in a film advertising the hats sold by a shop in which she worked as an assistant, but her first appearance in a film story was, strangely enough, in a slapstick comedy which set out



RAMON NOVARRO IN "BEN HUR." PRODUCED BY M.G.M. IN 1926



—*Courtesy Paramount.*

THE LATE RUDOLPH VALENTINO WITH AGNES AYRES IN "THE SHEIK," PRODUCED IN 1921

to ape the conventions of the American custard-pie comedy.

It was called "Peter the Vagabond," and was, by all accounts, a 'poverty row' picture, only the camera-man being a professional. The rest of the players were theatrical 'supers' or, like Garbo, girls with no experience at all. One male member of the cast was a milkman.

It cost just over a thousand pounds to produce, out of which sum Garbo managed to rake off a couple of pounds for four days' work. The actors had to buy their own lunches, but it goes on record that Garbo, whose appetite has often been the subject of comment in the American 'fan' magazines, succeeded at last in wheedling the producer into standing the four or five people concerned in the picture a lunch at an outdoor buffet in a park where most of the shots were made.

It was on July 14th, 1922, to be precise, that Garbo took up her role, and the day started badly with an argument between the producer of the picture—who was also the author and star comedian—and the camera-man. The latter, it seems, had recklessly run up the overhead by turning up on location in a taxi.

The first day's shots were made in the garden of a small private house belonging to a well-to-do merchant. There was no one at home except a maid, so the producer overbore her objections and started work. The next day the company returned to 'clean up' the sequence, only to find the gate locked against them. So the company, including the future Siddons of the cinema, climbed over the railings like so many school-

boys out on a foraging expedition for apples.

It was in this film that Garbo appeared as a bathing beauty. She was one of three girls camped alongside a lake. One of the 'props' was a real pike. After a few days it turned bad, but the producer insisted that it would be needless expense to buy another, so Garbo and the other two girls made the best of a bad job.

The picture made no great impression on its release. One native critic candidly suggested that it was a pity such good photography should be wasted on such a poor subject. No one knew or cared that Garbo had made her film début—except Garbo, who was so impressed by the new medium that she devoted all her energies to getting herself stage work, turning down offers for film roles as though they were hot bricks!

The rest of her story is too well known to need recounting—how she was persuaded by Mauritz Stiller to appear in "The Atonement of Gosta Berling," a super-picture which scored such a hit that its fame even penetrated to Hollywood, with the result that both Stiller and his protégée were put under contract to M. G. M. And how Stiller was given a picture to direct, but Garbo was allowed to wander aimlessly round the studio with nothing to do, except model bathing-suits for stills and pose with Leo, the M. G. M. lion, for publicity pictures, an insensate waste of time that so annoyed the artist impatient to be doing real creative work that she refused to comply with requests for her co-operation in publicity stunts as soon as she was of sufficient importance to the Hollywood scheme of things to have a say in the matter.

In old M. G. M. publicity sheets issued at the time of "The Torrent," one may still read articles 'written by Garbo,' which newspapers were asked to be kind enough to print gratis, in which the great artist opines that it is more thrilling to be kissed by a man with a moustache, and similar flap-doodle!

These old Press blurbs, like "Peter the Vagabond," are skeletons in Garbo's cupboard, no doubt.

Presumably the film 'in which Garbo appears as a bathing belle,' which is hawked round Hollywood from time to time (the latest report is that the owner wants a clear ten thousand pounds for it), is one and the same as "Peter the Vagabond." It was made fourteen years ago; no one would surely hold against Garbo these cinematic wild oats which she sowed in her early youth.

During those formative years, when Garbo was establishing herself in American pictures, Hollywood was marvelling at its good fortune in other directions as well. One had only to make films to the accepted formula to reap a golden harvest; the only cloud on the horizon was that there were far too many other concerns doing exactly the same thing. In fact, so machine-made did the thing become that the stock shot came into existence; if one wanted one's leading man to be confronted with an elephant, one made a shot of the leading man plunging through a jungle (built at the back of the studio) and asked 'the library' to send up a stock shot of an elephant, joined the two together and—hey presto!—on the screen the leading man jumped back startled and then—flash!—an elephant trumpeted at him. When it came to such things as shipwrecks,

earthquakes and tornadoes, the economically-minded producer could really let himself go, not only with stock shots, but with scenes which actually belonged to the year before last's pictures.

But the kings of Hollywood are not fools, whatever certain newspaper critics would have us believe. They knew that it could not last. They knew that, sooner or later, the pictures would have to find something new and vital if they were to hold the attention of the public. That pictures should become creative works of art instead of commercial commodities, or that stories might depart from the melodramatic novelette, hardly crossed their minds. No, what they wanted was something which would repeat the early history of the movies when pictures could be sold to the public on their novelty value alone.

The magnates of filmdom were in the moving picture game for money, and for money they were going to stay in it by hook or by crook ('by crook methods' are not entirely unknown in filmdom), and so publicity campaigns became more and more sprinkled with such adjectives as 'stupendous,' 'glorious,' 'magnificent,' and 'terrific,' sets became more elaborate, crowds bigger and bigger and stars more unlike anything that ever had human existence. The public had got to be kept in a queue at the box office. Certain independent groups in Germany and Norway and Sweden were turning out pictures that cared not a jot for superhuman stars or lavish sets, groups which believed that stories mattered more than stars, stories which had nothing to do with Cinderella and a Middle West Prince Charming, but

they were numerically too small and their productions too infrequent to make any impression on the never-ending cataract of celluloid pouring out of the film capital.

Then, quite quietly, a minor Hollywood film company, which had been living on the earnings of a dog, set about revolutionising the whole of the film business, sending shares bobbing up and down like corks in a mill-stream, and hitherto unknown small-part players to undreamed-of heights of stardom and established favourites down to the extra's ranks or outside the studio gates altogether.

And they did it with the very thing which had been taboo in film circles for nearly twenty years—pictures which talked!

CHAPTER ELEVEN

THE dog was Rin-Tin-Tin, the film company Warner Brothers. Rin-Tin-Tin, who recently went to his eternal kennel after a long and distinguished career, was an Alsatian trained for service with the German Army during the War, from whom he was captured by Lieutenant Lee Duncan, of the American Air Force. Rinty, as he was known to millions of film-goers, earned a salary of four hundred pounds a week. How much he earned for Warner Brothers is not divulged, but it is commonly supposed that it was the money from Rin-Tin-Tin's pictures that enabled the Warners to sign Ernst Lubitsch and produce "The Marriage Circle" and "Lady Windermere's Fan."

The Warners were the same four boys, Sam, Harry, Jack and Albert, who saw "The Great Train Robbery," and started a shop-show in the early days of the first immature 'flickers.' They were the same four brothers, too, who had helped Carl Laemmle in his organisation of the Independents to fight the Patents Company, but the Warners had not come through the battle unscarred. More than once they had seen their affairs get into the hands of others because, owing to lack of capital, they could not help themselves and, rather than suffer in silence what they thought to be bad mis-handling, they had broken their fetters and started

anew. Somehow, despite all the difficulties, they seemed to come up smiling. During the War they purchased the film rights of Ambassador Gerard's "My Four Years in Germany," which everyone assured them could only spell failure if made into a film. So the Warners made it into a film, and it brought them more than enough to purchase fifteen acres of ground and set up a real studio. That was in 1918.

The 'lot' boasted one small stage, two or three workshops, and employed sixty people. Followed another four years of struggle until "Main Street" brought them a lot more money. But they were not yet out of the wood. That they could make pictures, and good ones at that, there was no doubt, but they had to face the serious fact that their big competitors—such companies as Fox, Paramount, Universal, and United Artists—all owned chains of distributing agencies throughout the world. Warners could make pictures with comparative ease, but getting them into the theatres was a nightmare struggle. Finally Harry Warner, who looked after the business affairs of the company, decided the only way to distribute the pictures was to take over a chain of already well-established distributing agencies. Accordingly, he went to Vitagraph and asked them how much they wanted for their company. Rumours were already abroad that Vitagraph, probably the oldest film company then in existence, was finding post-war conditions and competition hard going. The outcome was the sale outright to the Warners of the Vitagraph Company. Cinema-goers who had been familiar with the Vitagraph trade-

mark—an American Eagle perched on an American flag on a shield—suddenly missed a sign with which they had been familiar for more than a couple of decades.

The only thing the Warners now required was publicity, and, in 1924-25, publicity was, so far as the United States were concerned, summed up in the term 'radio broadcasting.' Consequently the Warners planned to go on the air and, to this end, bought a second-hand broadcasting station. They had it delivered to their studio in a string of lorries and, within a week, had it working. Sam Warner, in particular, was vastly interested in the workings of the apparatus, so it seems only fitting that when Western Electric tried to sell a new invention to the film magnates of Hollywood, an invention that recorded and reproduced dialogue simultaneously with film pictures of the speakers, it was Warners, and the Warners alone, who showed any interest in the proposition.

Everyone else had turned the idea down almost out of hand. Hollywood remembered only too well the debacle which had ended every previous attempt to sell the public pictures which talked. Even D. W. Griffith had risked his reputation on a sound film, "Dream Street," just before the War. Synchronised with discs, it had been shown at the Town Hall, New York, with a complete sound score, and had proved a sensational hit. The newspapers had prophesied the dawn of a new era, but the Wall Street financiers had steadfastly turned their backs and exhibitors were unanimous in maintaining that sound films spelt ruin.

Nevertheless, Sam Warner went to see the Western Electric demonstration, and was captivated by the excellence of the synchronisation. True, the sounds which came from the loud-speakers were distorted and blurred, but they marked a distinct advance on anything that had gone before. But Sam Warner knew that his business-minded brother would not entertain the idea of experimenting with talking pictures, and a ruse had to be resorted to to get Harry to attend a demonstration. Before it was half over, Sam knew his enthusiasm had not been misplaced, but Harry was a showman as well as a business man, and he knew that, good as the synchronisation was, no audience would stand for such a travesty of the human voice. It was only when the dialogue film gave place to an instrumentalist that he had the brain-wave which was to disrupt the entire moving picture business of the world, a business which was computed to have an annual turnover in the United States alone of over a thousand million dollars.

Already surfeited with lavish movie fare, cinema patrons were demanding make-weight in the form of orchestras on the stage, variety turns, and other novelties. The big super-houses could afford lavish expenditure on these adjuncts to the regular movie programme, but the seating capacities of the small halls did not permit of gigantic and costly presentations of the kind. Harry Warner's inspiration was the making of variety turns, famous orchestras and operatic stars, as short sound films, which could be hired out to the small halls, providing their managers with the kind of fare their

patrons were demanding at only a fraction of the cost entailed in hiring and producing real stage acts. But it was one thing to plan to send out variety acts in a tin and quite another to bring the scheme to fruition.

The Warners had never been baulked by anything, and the problem of producing sound films—about which they knew nothing—did not discourage them in their task, for, at least, if they knew nothing about sound films, neither did anyone else. The possibilities of sending out a complete musical score with their full-length feature films to the smaller theatres, thus saving the cost of the orchestra, were not lost sight of, but to make *talking* films, they were all agreed, was likely to lead to failure.

Naturally they did not want their plans noised abroad, and as Hollywood talks movies and nothing but movies throughout the twenty-four hours of the day, it seemed wise to keep production in New York. The acquisition of the Vitagraph Company had included the old studio at Flatbush, Brooklyn, where John Bunny and Flora Finch, Mr. and Mrs. Sidney Drew, Maurice Costello and Florence Turner had made movie history. It had originally been a glass-top, that is its stages were simply enormous glass-houses which, with the passing of time and the universal adoption of artificial lighting for interior sets, had been blackened over to exclude daylight. When it rained, the noise inside the studio was like muffled machine-gun-fire, whilst the heat of the sun's rays pouring on the glass during summer months was terrific. Altogether, besides being old-fashioned, it was not particularly suit-

able for the production of silents, let alone talkies, but the Warners were out to learn by experience, and like everyone else who graduates in that hard college, they had to pay for the full course.

The first thing they learnt was that the ordinary movie camera made so much noise that it completely drowned everything the microphone was supposed to pick up. Consequently they had to place the cameras in sound-proof booths, which meant that the camera was back where it was in the days before Griffith discovered the value of varied camera angles.

Brooklyn had not seemed particularly noisy, but, as soon as one listened-in on the talkie apparatus in the Flatbush studio, one became aware that it was simply an inferno of motors running, errand-boys whistling, the whirr of aeroplane engines ; the whole made hideous with the hoot of far-off tugs and the clang of street cars. There was nothing for it but to sound-proof the studio, which meant that the actors were hermetically sealed up during the shooting of scenes. As if these troubles were not enough to contend with, the discovery was made that the arc lights (then used to light the scenes on all motion picture stages) were making a humming sound which, though inaudible to the human ear, was picked up by the microphone and completely spoiled recording.

The system on which Warners were working was a disc system, the discs being sixteen-inch single-sided gramophone records. Instead of playing at the customary eighty revolutions a minute, the record rotated at only thirty-three, thus the playing time of

the record was lengthened to approximately ten minutes; a reel of film of one thousand feet took some fifteen minutes to show, so, in order to bring the showing time of a reel of film and the playing of the record into the same time-limit, the photographing and showing of films was increased fifty per cent, which necessitated ninety feet of film passing through the camera every minute in place of the sixty feet used in silent days, a thousand-foot reel lasting but ten minutes on the screen. Though records have now been discarded in favour of the sound on film system, talkies are still taken and projected fifty per cent faster than the silent films of old, but as films are both taken and projected at the same speed, there is no difference, apart from absence of flicker, noticeable on the screen.

The Warners were, at that time, only planning to make shorts and to record musical accompaniments to otherwise silent films; they did not know they were going to commit the entire film business, in later years, to the use of fifty per cent more negative and positive film for every production turned out.

All these problems paled into insignificance beside the major problem of shooting one thousand feet of film without stopping to alter camera angles or insert close-ups, for the exigencies of recording on discs made it imperative that the starting-point on the film should coincide with the starting-point of the cutting stylus on the soft wax record, and that when both had once started 'in step' it was fatal to stop if synchronisation was not to be lost. This was not an insuperable difficulty in recording musical accompaniments. the

already completed picture being projected on a screen in the studio whilst an orchestra played to it, the microphones recording the sound; but the making of short films of instrumentalists offered a more difficult problem, for no one would sit patiently through a ten-minute long-shot of a man playing a one-stringed fiddle, for instance.

The problem was partly overcome by connecting two cameras up with the recording apparatus, one having a different focus lens to give close-ups. The two negatives were then laid side by side and extracts were cut out of each; in this way the film remained exactly the same length as before, but was actually a combination of long shots from one film and close-ups from the other balanced up foot for foot.

Even this offered no satisfactory solution when it came to the recording of plays in which a change of scene was essential, so all kinds of ruses had to be resorted to to bring about the desired result. In one short dealing with the adventures of some 'doughboys' on the Western Front, which called for three scenes—the inside of an estaminet, a front-line trench, and a jail—the three scenes were built side by side in the studio and the shots of the estaminet were arranged to end with one of the boys getting excited and blowing out the lamp. At this point the cameras, without stopping, slewed round on to the trench scene, while the recording continued without a break. Similarly with the change from trench to jail; the cameras simply faded out, were slewed round on to the jail scene (which the actors had rushed into during the brief interval the

camera lens was covered) and the action proceeded, the stylus continuing uninterruptedly.

Movie history always has repeated itself; as has been seen, its early days gave ample proof that great minds think alike. In the late eighties, half a dozen men in different parts of the world were all trying to make pictures which moved; in 1924-26, at least three or four independent groups were battling with the problem of how to make pictures which talked.

While the Warners were striving to elucidate this problem, similar struggles were going on in studios as far apart as Clapham and Berlin.

The Clapham studio had started life as an assembly rooms. It had been many different things in turn; during one phase of its history, in 1907, it had been a cinema. It is situated in the Clapham Road, quite close to a railway bridge over which steam and electric trains thunder every few minutes. Like the Vitagraph studio at Flatbush, it had been the scene of many silent triumphs; the Holmfirth Producing Company made melodramas starring Queenie Thomas there many years ago. To-day it is a social club, and billiard-balls click where once the cameras whirled.

It became the home of Lee De Forest Phonofilms round about 1925, and they started producing sound-on-film talkies—that is to say, pictures with a photographic record of the actors' voices on the edge of the film. Already, in the early part of 1924, Dr. Lee De Forest had produced a two-reel talking picture by the sound-on-film system in America. Called "Love's Old Sweet Song," it featured Una Merkel and De Forest's

wife, an accomplished singer. When the film was completed, its inventor expected to exploit it as a variety 'turn' on the music-halls. Production difficulties, however, were tremendous.

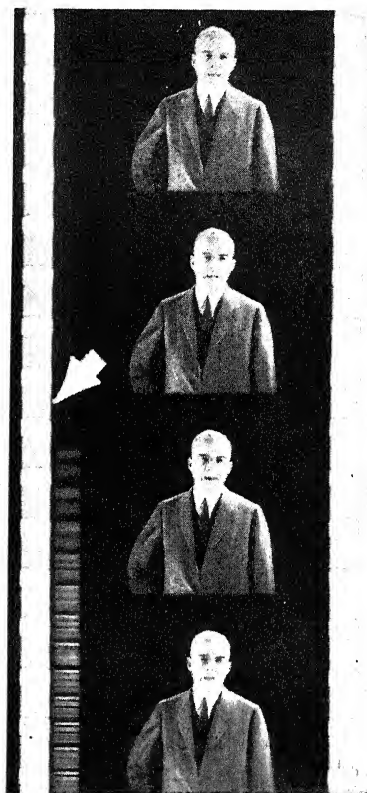
"Talking pictures now are a bed of roses in comparison with the torture we went through in the De Forest film," is how Miss Merkel describes it. "I was in my 'teens' and had got the job largely through my resemblance to Lillian Gish, whom I had understudied. The room in which we worked was just large enough to accommodate one set, and was heavily padded to keep out unnecessary noises. It also kept out fresh air. That precaution was due to the extreme sensitivity of the recorder, which looked like two smoke-stacks with a connecting wire. When I stopped speaking and the leading man answered me, they had to turn all sorts of screws and levers to adjust wave-lengths, or something, to accommodate the voice.

"I don't know what became of the picture, but I do know that we worked harder than on any ten-reel picture I have appeared in since. When the talking picture excitement of 1927 was turning Hollywood upside down, I felt like a seasoned veteran."

To photograph a voice, as in Phonofilm and other sound-on-film systems, sounds, and is, an impossibility. Actually the thing photographed is the variations in the intensity of a tiny light, focused on the edge of the film, caused by the vibrations made by the actors' voices when picked up by the microphone. The sound-track, as this photographic record is called, is, in appearance, an extremely narrow 'ladder' running

the whole length of the film, certain 'rungs' being lighter or darker than others according to the intensity of the sound recorded. On the projector in the theatre is fixed a small lamp, having a steady glow, which shines on to the sound-track through a narrow slit. On the opposite side of the slit is a photo-electric cell which flickers in sympathy with the amount of light filtered through the 'rungs' of the ladder on the edge of the film. This flickering sets up electrical impulses which vibrate the diaphragms of the amplifiers behind the screen, thus creating in the theatre a life-like re-echo of the voices as recorded in the studio. This does not pretend to be a scientific explanation; it is simply a brief outline of the miracle of mechanism which gives us our talkies to-day, and is necessary here to enable the reader to realise the enormous difference between films using the synchronised disc system, with which Warner Brothers revolutionised the film business, and the sound-on-film system which is the accepted one throughout the world to-day. Everyone knows that the introduction of talkies caused upheaval, but still greater chaos, if such were possible, was caused by the introduction of two totally different talking picture systems at the same time.

Compared with the old Vitagraph studios, in which Warners were working, the Clapham Road studio was even worse for the task in hand. The noise of the passing trains was only partially obliterated by the hanging of velvet and canvas 'screens,' and when a fast goods train went through Clapham, De Forest phonofilms had to call a halt.



—*Courtesy Western Electric.*

A STRIP OF SOUND FILM
THE SOUND TRACK IS
UNDER THE ARROW

Sound-on-film has at least one great advantage over sound-on-disc. It is possible to cut film into scenes, but quite impossible to cut up discs, but if, as in sound-on-film, the track is actually on the edge of the picture, it is a simple matter to cut both sound and picture. (Actually, sound and picture are not opposite to one another on the film, the lens of the projector being several inches higher than the apparatus for reproducing the sound in the theatre; therefore it follows that the photographic image of a scene must be several inches away from its corresponding sounds on the film, but this is only a matter for adjustment in printing.) Phonofilm-recording did not, therefore, present quite the same tremendous difficulties as faced the Brooklyn pioneers; nevertheless, Miles Mander, who directed these early sound-on-film pictures, found the road by no means strewn with roses.

The Clapham studio camera boasted only one lens—a two-inch one. It had no fading device or iris and no finder that was of any use, while the stage equipment consisted of two old-fashioned spotlights and two banks of mercury vapour lamps. But the progress of talkie technique made surprising strides under these adverse conditions. Two of the early pictures, "As We Lie" and "The Sentence of Death," contained sound, music and dialogue. It was possible to include exterior scenes; the voices of actors talking off—that is to say, shots of the *listener* were shown to the accompaniment of the voice of the person *speaking* to the subject of the close-up, while change of shot was practically no problem at all. In one film more than fifty different scenes and

individual shots were included in one thousand three hundred feet, it being necessary only to assemble the film in the same way as a silent picture. Those early talkies had a great deal in common with the silent film; there was none of the camera-bolted-to-the-floor flavour of the early sound-on-disc talkies; close-ups, mid shots, long shots, flashes, exteriors and interiors all followed one another in rapid succession, thus preserving the essential fluidity of the moving picture medium, and there was no mad scramble to include sound or dialogue on every inch of the picture, a fault which marred most of the early American talkies, for Miles Mander was not afraid of using silence as well as sound. It was a pity that a great deal of his early technique was swamped by the American invasion for three or four years, and has not, even now, been entirely reinstated in its rightful place.

Lilian Hall Davis, Owen Nares, Dorothy Boyd, Malcolm Keen and Mary Clare all figured in these early British talkie ventures, which were exhibited, as were the first silent movies, as items in music-hall programmes. So far as this country is concerned, the very first theatre built and equipped specially for showing talkies was in the British Empire Exhibition at Wembley, where, for sixpence, one could experience an hour of weird and wonderful sounds accompanied by moving pictures. In those days nine voices out of ten recorded badly on the primitive apparatus then in use, and the distortion, surface noise and the 'frying' and sizzling sounds which emanated from the speakers behind the screen did not bear any marked resemblance

to real life. But these defects were not to be found in the early British talkies alone; many of the first Warner Brothers' 'shorts' treated us to screams which sounded like un-oiled hinges and slammed doors reminiscent of the San Francisco earthquake.

As the pioneers pushed ahead, making movie history hourly, unknown to each other, two or three other claimants to honours in the talkie field had entered the fray. On February 11th, 1926, a British Acoustic experimental film called "A Wet Night," featuring Arthur Chesney, the well-known West End stage actor, was completed at the Weissensee studio in Berlin. The first films to be made in Britain by this system were produced at the old Lime Grove studio at Shepherds Bush, at least a year before "The Singing Fool" was shown. The sound-proofing consisted of a bell tent erected in the ordinary studio, and the synchronisation marks were made with a couple of saucepan lids. One day this unit went to Buckingham Palace, with permission from the King, and filmed the Changing of the Guard with sound. When the film was shown in the studio everybody was amazed. The possibilities which it opened up were staggering, but there the thing languished, and America beat Britain with the first talkie. Almost simultaneously, in Hollywood and New York experiments were being made with yet another sound-on-film system—The Fox Case Movietone.

Like the Warners, William Fox, who sponsored the latter system, sprang from humble stock. His father ran a general store in the village of Tulchva, in Hungary. Then the family emigrated to America, and young

William's first job was going around the tenements where they lived selling stove blacking. When the trade fell off, he sold cough lozenges, at which he did so well that he was able to employ several other small boys on a commission basis. Other jobs followed—in clothing stores and as an umbrella dealer—until he blossomed out, with a partner, as a vaudeville turn. Sometimes they got as much as two pounds ten for giving their act at local dances. Various other side-lines and minor excursions into trade brought Fox a little capital, with which he decided to purchase an automatic amusement arcade. One of the attractions was Edison's Kinetoscope peep-show machine. Alas, the amount of business done by the machines in the arcade did not live up to the vendor's glowing promise, and Fox, disappointed, had to think of ways and means to get the public into the show. Upstairs there were some empty rooms, and he turned one of these into a miniature movie theatre. Entrance was from a doorway giving directly on to the street. After the pictures had been shown, so Fox planned, the audience were to leave by a staircase at the back, and thus pass through the arcade, where they could not fail to be attracted by the novelties on show. The scheme appeared to be a sound one, but it misfired because movies were so young that the general public neither knew nor cared what a living picture might be, and did not bother to go upstairs in the first place.

Undaunted, Fox hired a conjuror and had him stand at the foot of the staircase leading up to the cinema. The man would do a number of tricks and attract a big

crowd and then, under pretence that the people were causing obstruction, invited them upstairs to see a further display, promising them that the exhibition was free. Having got them seated and shown one or two more feats of legerdemain, it would be announced that something more marvellous would be presented—living pictures—if they would but pay a small fee.

In a few days the marvels of Fox's show had spread throughout the district, and the police were busy keeping the crowds back. Soon Fox had fifteen of these shows running in Brooklyn and New York. In the main, they consisted of nothing more elaborate than a large empty room, a projector, a linen sheet, and a couple of hundred chairs. Soon Fox owned one or two important theatres besides his chain of halls. The setting up of a film-renting concern followed naturally, and when the Patents Company came into existence, Fox was aligned with the Independents. Like Laemmle and the Warners, he came out of the struggle victorious. A few years later Fox was, with Lasky, Zukor, Goldwyn, and Laemmle, one of the acknowledged figure-heads of the American motion picture business.

When the first rumours of Warner Brothers' talking picture plans reached him, he gave it as his opinion that synchronisation of movies with gramophone discs would never be entirely satisfactory; he insisted that films and sound must be contained on the same base. In the spring of 1926, he walked into his office and was asked by his brother-in-law, Jack Leo, to go immediately to the projection-room. Now Fox had visited the projection-room at his New York office every week for

years; judge of his amazement when a picture of a canary in a cage was thrown on the screen and it began to sing. This was followed by a 'short' of a singing Chinaman, who played a ukulele. The sound wasn't very good as regards quality, but it synchronised perfectly and was clearly identifiable with the lip movements of the speaker or singer; in other words, it was a tremendous advance on all other so-called talking pictures Fox had seen.

In the room above the projection theatre a tiny sound-proof stage had been equipped, and it was explained to Fox that pictures which talked could only be made in buildings insulated against all extraneous sounds.

Fox was very disappointed. "That means that all our pictures would have to be set wholly in interiors, cutting out half of the charm of the movies—natural backgrounds, sunlight, the real countryside and city streets!" They assured him that this was inevitable. Fox sought an interview with Case, the inventor of the Movietone system. He said: "I'll give you a million dollars to spend if, within four months, you can make this thing work out of doors as well as in." Within a couple of months they asked Fox to go into the projection-room. On the screen were roosters crowing, locomotives tearing over bridges, cowboys thundering after war-whooping Indians. Fox's million dollars had been well spent; Movietone worked out of doors as well as in.

Like the Warners, Fox bethought himself how the new and revolutionary invention could best be used.

The Warners were going to use their Vitaphone, as they called their disc system, for variety 'shorts,' and Fox, at first, did not see the full-length dialogue picture as either practicable or, from the showman's point of view, desirable. The legend that pictures which talked merely shouted "Failure!" died hard. News-reels had become a little monotonous, audiences were getting tired of the never-ending cycle of beauty queens, battle-ship launchings, athletic events and 'quaint customs' which made up the contents of ninety-nine news-reels out of every hundred. If sound could be added, news films would not only be given a new lease of life, but their scope would be enormously broadened; statesmen making speeches, all the sounds of the huge crowds at the football matches, the drone of aeroplane engines on record-breaking flights, the blare of military bands, and so on, would bring news, living and vibrant, to the movie audiences, and the events of the day would take on a stark reality which no newspaper could emulate. Thus was the Fox Movietone News born. Camera-men, equipped for the first time with cameras which recorded sound as well as pictures, were sent to the four corners of the earth.

Things were moving fast with William Fox, but even faster with Warner Brothers' Vitaphone pictures. Already the old Vitagraph studio had proved inadequate, mainly owing to its bad acoustics, and the experimenters, still blindly groping towards perfect recording, hit upon the idea that a theatre, preferably an opera-house, would prove the ideal building in which to record sound films. Consequently the 'sets' and

equipment were packed on lorries and taken from Brooklyn through the heart of New York to the old Manhattan Opera House. The stalls of the old theatre were boarded over and batteries of incandescent lights mounted above the stage. It was only a makeshift studio at the best, and there was no monitoring room, except a room at the back of one of the topmost circles.

To add to their difficulties, the rooms in the front of the theatre had already been sub-let by the owners to a Masonic Lodge, and the Masons demanded the use of all of them at night, so, every day, the Warner technicians had to shift out all their apparatus in the late afternoon and put it all back again in the early morning. Then, as if this was not enough, the City engineers started boring a tunnel under Manhattan, and the delicate recording instruments were completely thrown out of gear by the concussion of blasting operations going on below ground. There was nothing for it but to shift out to California.

On the Warner 'lot' in Hollywood the very first sound-proof studio designed for the production of talking pictures came into being. Meanwhile, one of the greatest difficulties of recording had been overcome—the changing of scene and shot without loss of sound synchronisation. This was the way of it—one of the early full-length feature films to which a complete sound score had been recorded on discs became the subject of criticism in one of the States. Local censors demanded the elimination of a scene. Formerly it would merely have meant snipping out the offending portion

and joining up the two ends, but the mechanical sound accompaniment complicated matters almost to the point of impossibility. Though one could cut a portion out of a film, it was obviously impossible to cut a corresponding portion out of the sound accompaniment on the wax record, and if the film were cut without a corresponding cut being made in the accompaniment, the whole thing would be thrown out of step. Technicians, working secretly, tried an experiment. They re-recorded the sound on to another record, eliminating the portion of the track which corresponded to the scene which had been discarded. Several attempts were made before they were successful in re-recording a shortened version of the musical accompaniment in synchronisation with the cut film, but at length their efforts were crowned with success and the problem of changing sound with scene was solved. Thereafter each scene was made with its accompanying sound on an individual record, the whole being re-recorded on one master record when the scenes on the film were assembled.

The first all-sound film programme ever exhibited was given at the Warner theatre in New York on August 6th, 1926. It comprised: Will Hay, the Czar of Motion Pictures, in an introductory speech; the New York Philharmonic orchestra; Marion Talley; Ephreim Zimbalist and Harold Bauer; Roy Smeck; Anna Case; Mischa Elldam; Giovanni Martinelli; and John Barrymore in "Don Juan."

So great was the Warners' concern that everything should go without a hitch that they had the projectors threaded in duplicate. Thus projectors Nos. 1 and 2

both had copies of Part One on them, while projectors 3 and 4 both had copies of Part Two. The corresponding records were also in duplicate. When Part One was shown both projectors bearing that part ran simultaneously, though the iron fire-shutter was closed in front of one of them. In this way, if any mishap occurred to the film or the record, all the operators (there were *three* of them to each machine!) had to do was to clap down the shutter on the faulty machine and open up on the one alongside, which would carry on from the same point.

Despite these precautions a mishap did occur, but fortunately not on the opening night. An operator put on the wrong record for the Will Hay film and the startled audience heard the Czar of Motion Pictures give a perfect imitation of a banjo solo instead of his promised speech.

Notwithstanding these minor drawbacks, the programme was highly successful, so much so that the Warners as well as many exhibitors who had seen the première and were clamouring to know how they could get equipment for their theatres, knew that synchronised sound, if not talkies (for the Barrymore picture had been merely sound-synchronised and contained no dialogue) had arrived.

Nevertheless, the Warners were still dubious about going the whole hog and introducing dialogue into 'straight' full-length feature films. That the public liked talking 'shorts' there was no doubt, but that they would stand an hour and ten minutes of undiluted dialogue was another matter; in fact, so scared were

the movie men of meeting the same fate which had befallen the promoters of all other attempts to make pictures speak that it was actually strictly forbidden in the Warner publicity departments to use the words 'talking pictures' in connection with their Vitaphone productions.

It was decided to compromise and to introduce one or two songs into an otherwise silent picture. Al Jolson, popular on the American variety stage, was chosen for the experiment. The picture was of the kind known to showmen as 'sure fire sob-stuff.' It went into production almost immediately, and an incident occurred which was destined to alter completely, almost from pole to pole, the motion picture business of the world.

Jolson, having become accustomed to gagging suitable words to the situation in the silent scenes of the "Jazz Singer," forgot, when it came to the sequence in which he was to sing the first song, that the microphone had already been brought into play. He crossed the set to go to the piano preparatory to playing the opening notes of the song and, as he did so, turned to the actress playing the role of his mother, and said, "Say, Ma, listen to this." When the technicians heard the play-back of the scene, this spontaneous line fitted in so well as an introduction to the song that they decided to leave it in.

"The Jazz Singer" opened at the Warner Theatre on October 6th, 1927. Everyone who was in any way connected with the movie business and who could get hold of a ticket crammed into the vestibule long before

the starting time. Movie fans rubbed shoulders with stars, and stage hands with the fashionable leaders of New York Society. No one quite knew what to expect, but that they all expected something revolutionary went without saying. Less than a year before the Warners had taken New York by surprise with their all-sound programme, now they promised a fresh thrill with a feature-length picture which sang. As the audience at last settled in its seats and the lights dimmed out in the theatre and the great curtains swept apart and the first sounds of the Vitaphone accompaniment came from behind the screen everyone sat silent, tense, expectant. The picture progressed more or less like any other movie, except that there was no orchestra in the pit below the screen, but a canned symphony coming from loud-speakers set behind it.

Then when Al Jolson crossed the room to the piano, the miracle happened. Without warning the audience was electrified when words suddenly came to life on his lips: "Say, Ma, listen to this!" The effect was magical; the homely phrase sealed the future success of talkies as nothing else could have done. But, even as Al Jolson uttered these words, another drama, more poignant than anything contained in the film, was, as has so often happened before in the story of the movies, enacted behind the scenes. The enthusiastic audience enjoying itself at the world's première of the first talkie was quite unaware that what they were really seeing was a monument to a man who had wrought a miracle, but had not lived to see its fulfilment. For as "The Jazz Singer" unwound its triumphant way on the pro-



—Courtesy Warner

AL JOLSON IN "THE JAZZ SINGER"

jectors of the Warner Theatre there was not one of the Warner brothers in the theatre to see the première that was to make or break them, for Sam Warner lay dead, stricken down by a sudden illness twenty-four hours before the show.

CHAPTER TWELVE

THE première of "The Jazz Singer" proved once and for all that the public would pay to see talking pictures provided synchronisation was perfect and reproduction reasonably good. In showman's parlance, "The Jazz Singer" was a 'riot' and pictures which talked were no longer 'the bunk.'

There was only one thing which detracted from the golden period which seemed to be at hand. The motion picture business had had many gold rushes in the past and its Klondykes had been attainable by those companies which were sound in wind and limb. To the Warners, however, was presented the tantalising prospect of seeing the Klondyke only a short distance ahead and being unable to reach it, for the whole of the movie business, outside of the Warners' immediate interest, was founded on silent films and the whole of the theatres equipped solely for silent pictures.

In order to supply the public with the talkies for which they were clamouring several studios were required to supply the number of productions necessary to lift synchronised films from an infrequent novelty to a steady and constant supply. Worse still, if sound films were to reap the harvest while public interest was at fever pitch, thousands of theatres would need to be equipped with sound apparatus. Actually, apart from the little assembly rooms-cum-sound-stage in Cranmer

Court, Clapham, and the sound-proof studio on the Warner lot in Hollywood, there were no studios equipped for the making of talkies, and the number of theatres wired for sound probably did not exceed a hundred.

To complicate matters further, the leaders of the American film industry, forced to sit up and take notice of the phenomenal success of "The Jazz Singer," got together to decide on a concerted line of action. Talkies threatened to invade their silent film territory and, if allowed to encroach too far, looked like coming off victorious. The Warners' position was only too apparent to the owners of the leading studios and principal chains of theatres. Their counter-attack was simplicity itself; if they refrained from making talking pictures—even supposing they had the necessary apparatus, which they had not—the Warners would be unable to cope with public demand and, in the face of tremendous competition of the well-organised silent film business, the public would soon tire of seeing an isolated talkie here and there and the craze would die a natural death. After all, they argued, the Warners could not supply and equip the world's theatres for talkies, for, even if the apparatus could be manufactured quickly enough, the number of independent theatres was only a fraction compared with the chains owned by the big producers, and, publicity being what it was, those making silent films could soon wean the public away from the new stunt.

These arguments were sound up to a point, but they made no allowance for the fact that though the chiefs

of the film business sat in mahogany offices, surrounded by secretaries, generally enacting the roles of men of affairs, they were still showmen at heart and the showman's creed is: Give the public what they want, when they want it—and the devil take the hindmost.

It was not long before there were breakaways from the pact. Soon most of the producers were conducting secret negotiations for any and every kind of sound-recording apparatus available—sound on film, sound on wire, even the cutting of a sound track on the margin of the film itself—all were being frantically explored.

Fox already had an arrangement with Western Electric for the use of apparatus covered by that company's patents and his talking news reels and variety shorts were extraordinarily successful. Soon, too, the Radio Corporation of America introduced another sound-on-film system, similar to Movietone but recording the light rays on the edge of the film in a different manner.

If the public were talking-picture mad, the producers were soon equally wild in their frantic attempts to outstrip one another to rescue the plums before Warners stripped the tree.

One "Jazz Singer" doesn't make a choir and Warners speedily introduced interpolated talking sequences into several already completed silent films awaiting release.

The order of the day was talk and more talk, and so plans were put in hand at once to produce the first full-length all-talking picture.

It was a gangster melodrama called "The Lights of

New York." It was not a very good film and, partly because it was not shown in London until several months after full-length talkies were the order of the day, excited little, if any, public attention. Its theme was gruesome in the extreme and contained a macabre sequence in which gangsters "bumped off" a victim in a hairdressing saloon and then, unexpectedly dropped down on by the police, sat the body up in the barber's chair, placed a towel round it and proceeded to shave it, while a garrulous police officer planted himself in a chair and talked to the murderers what time they carried on a one-sided conversation with their victim's corpse.

For all its imperfections and its lack of family entertainment values, it was outstanding for its clever exposition of the new medium. True, the camera had lost its former mobility, but the scenes were still quick and crisp after the silent film fashion. Had it excited more attention the long phase of the photographed stage play which the public had to endure might have been obviated altogether.

The next experiment was "The Terror," based on a successful play by Edgar Wallace. It belonged to that Hollywood school which can only think of horrific films in terms of cobwebs, owls and toads. The lights went on and off with or without reason every few hundred feet, a mysterious organ pealed forth from the cellar beneath the reputed haunted mansion. Screams, of course, play an important part in stories of this kind and, unfortunately for the Warners, recording apparatus did not take kindly to high-pitched sounds in those

days; Louise Fazenda was seen in close-ups with her mouth wide open and her eyes protruding, but with only a curious gurgling sound emanating from the screen. Further, to complicate matters, the scene was laid in England and contained a bad blunder which sent the first-night audience at the Piccadilly Theatre into a gust of laughter; a detective called in to investigate the mysterious happenings asked if he might be allowed to telephone. Picking up the instrument this member of the English police cried in nasal tones, "Operator—operator! Give me the *branch office* of Scotland Yard." A further shock was in store for the audience when beautiful May McAvoy in the person of the heroine turned upon the misunderstood hero and snapped, "You, yeh little *clam!*"

That first performance made it clear that the makers of talking pictures were up against greater problems than those of recording. The silent pictures had spoken a universal language; with the introduction of dialogue all kinds of new problems connected with racial customs and accents were revealed in terrifying array. A picture which would please audiences from one end of America to the other would only serve to bring a smile of derision in English theatres and vice versa. As for the enormous market which the non-English-speaking countries had provided in the past, it seemed as though this was gone for ever.

Time brought many changes; the screen adopted a new kind of language, a mixture of American idiom and modified American-English accent. But the problem of the foreign markets, which it was at first

hoped to meet by making multi-lingual versions, remains unsolved. A compromise is still being attempted by printing captions in the language of the country in which the picture is shown, but the drawbacks and defects are obvious, and the huge foreign market which used formerly to bring so much grist to the Hollywood mill is now only a fraction of what it was.

Britain was slow to follow Hollywood's lead. English exhibitors and producers took the stories of the talkies' success in America with a very large pinch of salt. The general opinion seemed to be that the talkies were merely a passing phase and that it would be foolhardy to jeopardise the position of the British industry at that juncture, for the Quota Act had just come into force and promised to give British pictures new and vigorous life.

"The Jazz Singer" opened at the Piccadilly Theatre on September 27th, 1928, "The Terror" followed it in October of the same year. Thus Britain was nearly a year behind America in the talkie race, for race it soon became. There was no doubt that the British public was just as enthusiastic about talkies as its American cousins, but the newspapers busied themselves with printing the opinions of famous persons, who probably did not go to the cinema anyway, on the new innovation. It would be unkind to their sponsors to recall some of the prophecies which were rashly made at that time as to the fate of the talkies for, almost without exception, dire and overwhelming failure was predicted! Critics who had been loud in their condemnation of everything the silent film had striven to do since

newspapers had first deigned to take notice of them, could now find nothing but praise for the silent film, seeing in it all kinds of artistic promise and possibilities which they had hitherto denied, and seeing nothing but dismal portents in the attempt to make pictures talk. Just as one imagines diehards of thirty-five years before protesting that it was unnatural to make a picture move, these Jeremiahs—and their number was legion—saw only an abortion in a picture which spoke as well as moved.

But the public knew what it wanted, and what it wanted was novelty. It cared nothing that the sounds emanating from the speakers were harsh and tinny, or that the films themselves were the worst kind of Hollywood melodrama made articulate and with nothing but banalities to utter.

The British film industry speedily became aware that all was not well in the camp. The public were deserting silent pictures, even good ones, to pour their money into box offices blazoning the coveted legend 'Talkies.' Burlington Pictures, at Elstree, had on the stocks an almost completed picture called "Kitty," from a novel by Warwick Weeping. They decided to make the last reels '100 per cent dialogue.'

The difficulties were tremendous. There were no sound-proof stages in Britain, if one excepts the little Phonofilm studio at Clapham, and but a handful of technicians versed in the production of sound films. Accordingly, it was arranged to ship the scenery and stars to New York and to complete "Kitty" in a sound-proof studio there.

The first half of the film was sound-synchronised but without dialogue. The first spoken word was introduced, daringly enough, in the *middle* of a scene. John Stuart, as the paralysed hero separated from his wife by his loving but tyrannical mother, is enjoying an excursion by car to an up-river tea-house; seated in the car, he espies his wife tinkering with a car on the other side of the road. The wife, Estelle Brody, runs across the road and, leaning over the side of the car, her husband greets her: "Oh my dear." The roadway scenes were actually made up-river, but the shot of Estelle Brody running in and leaning over to her husband was made in the sound-proof studio in New York, but so cleverly were the shots matched that few film-goers who saw the picture realised that a distance of four thousand miles separated long-shot from close-up, or that John Stuart's "Oh my dear" was the re-echo of Al Jolson's "Say, Ma! listen to this." In short, that Britain was ready to bridge a distance greater than four thousand miles—nothing less than the tremendous gap between silence and sound.

Prompted by the success of "Kitty," B. I. P. turned its attention to making Britain's first full-length talkie. The task was entrusted to Alfred Hitchcock, who was given "Blackmail," a picturisation of a stage play, to direct. Anny Ondra, the German star, who could not speak English, was given the lead, so Joan Barry, then unknown to cinema patrons, doubled throughout the picture for Miss Ondra's voice!

Soon the Gaumont Company followed B. I. P.'s lead with "High Treason," and it was not long before all

the other British film companies found themselves forced, willy-nilly, by public clamour into turning their attention exclusively to sound films.

The change-over from silence to sound and its accompanying trials and troubles, not unconnected with theatres which had no proper acoustics and records which somehow got out of step with the picture in the hands of inexperienced operators, are too recent happenings to need recalling.

Soon Hollywood was sending a steady stream of talkies that were entertainment as well as novelties—"The Trial of Mary Dugan," "The Hometownners," "In Old Arizona" (the first outdoor talkie), "The Broadway Melody," and many more. The inevitable happened. Hollywood, smarting under an inferiority complex for years (it is one of the symptoms of this complaint that the patient boasts and swaggers in order to disguise his inner feelings), suddenly discovered that with the advent of dialogue in pictures the stage no longer had the artistic upper hand, and immediately poured out a flood of backstage dramas which were simply an excuse to put on the screen the type of stage entertainment which it had been forced to concede in the past the screen could not attempt. Not only did they bring the stage into the cinema but they also made ruthless fun of the stage folk and their ways. Hollywood was hitting back and hitting hard, but the public, unaware that what they were seeing was satire, simply revelled in the sudden expansion of its screen fare.

"One hundred per cent talking" became the slogan of the day. Orchestras were banished from the theatres

and, to this day, Hollywood or Elstree would no more think of producing a silent film than a set of magic lantern slides.

As I write, there is but one silent cinema left in Britain. Up to a few weeks ago there were two, but, with the death of its proprietor, The Sun Picture Hall at Byker, Newcastle-on-Tyne, closed its doors on the silent shadows for ever. The sole survivor is the Electra Palace at Royton, in Lancashire. Originally a tram shed, it has been showing pictures continuously since 1910. The prices of admission are twopence and five-pence, but, true to the real old-time tradition, it boasts a pianist. This modest little hall, merely by reason of its miraculous powers of survival, holds a place in the history of the cinema that not even the most sumptuous super-palace of 1935 can ever hope to emulate. It is, in fact, the last stronghold of an art form!

This abandonment of the silent film is absurd and unlikely to last indefinitely.

For more than thirty years silent pictures entertained audiences all over the world; they created a form of expression which borrowed a great deal from the art of the photographer and still more from the mime and ballet. It owed little or nothing to the theatre. At least two films were produced which owed nothing to the printed word—Charles Ray's "The Old Swimming Hole" and Henry Edward's "Lily of the Alley." They were 'cinema' pure and simple, and the all-talkie holds nothing in common with them or the thousands of other worth-while silent pictures that followed Griffith's "The Birth of a Nation." That the whole of this gradual but

persistent striving towards perfection in the silent film should now be lost for ever is a tragedy as awful as it is fallacious. Any showman or producer will tell you to-day that the public would not have silent pictures back again at any price, but ten years ago they were just as vehement in declaring that talking pictures were the surest way of ruining the cinema business, so it is not worth while paying too much attention to the prophets.

There are certain stories which demand to be told on the screen in silent form; let one producer of courage and conviction arise and make a silent film now and the chances are that the public will flock to see it, especially if mechanical synchronisation is discarded in favour of the human orchestra. That the talkies have come to stay there is not the slightest doubt, but that they should have strangled the silent film is a 'crime' which demands that justice be done, and justice in this case is allowing the silent film at least a *share* of the screens of the world's cinemas.

It takes conviction in these times to speak up on behalf of the now despised silent picture—but one's moral backing takes the shape of a little man with a bowler hat and baggy trousers, one Charles Chaplin, usually designated by the uncritical as the greatest comedian and pantomimist the world has ever known. Chaplin may use funny synchronised sounds these days, but he still staunchly believes that the language that the whole world understands and can laugh over is the language of actions, mental processes and facial expressions, which need no human voice to point.

There can be no argument, however, that to at least one section of the screen's fare the coming of sound admits of no return to silence—that is the news reel.

No other branch of the entertainment business can boast anything comparable with the news film. The theatre confines itself solely to drama and the concert hall to music, but the cinema presents a résumé of the day's news in addition to its dramatic entertainment. Only the radio broadcast, with its news bulletins, rivals the position which the cinema holds as a purveyor of news as well as entertainment and instruction.

Though the news reel has its place in the programme of every cinema throughout the world, the development, the history and preparation of this item are so different from the usual run of films that the news reel merits a section to itself in the story of the movies' romance.

The very first programme of films ever *publicly* presented—Monsieur Trewey's exhibition for the brothers Lumière at the Marlborough Hall, in the Polytechnic Institute, Regent Street, on February 20th, 1896—might well have been the forerunner of the programme of a modern news theatre. Though the items on the programme were not exactly topical, they included such 'interest' pictures as: "Racecourse Scene," "Ludgate Circus," "Hyde Park at Noon," "Champs-Élysées, Paris," "The Arrival of the Mail Boat at Folkestone," and "Changing of the Guard at St. James's Palace." In addition, the programme included little excerpts of comedy and other 'shorts' of domestic interest.

But the honour of opening the very first news-reel theatre in the world probably belongs to the late

Alexander Rapoutat, a French pioneer, who, as far back as 1897, had a little hall on the boulevards of Paris and, to packed audiences of upwards of eighty people, showed programmes of incidents which he had himself taken on the streets during the day, using a camera which, with the addition of an illuminant, had also to do duty as the projector in the theatre at night!

The efforts of the early pioneers, Robert W. Paul and the Bromheads, in filming important events such as the Derby and screening them in London the same night have already been dealt with, but mention should be made of another undertaking, The British Bioscope Company, which made topicals on film half the width of a postcard. The pictures had no perforations, being fed over rollers on apparatus so heavy that it would make the modern manager look askance before installing it in his theatre.

Because of the absence of sprockets, it was essential that the camera should run at a constant speed, and a motor was employed to provide the necessary driving force.

At the funeral of Mr. Gladstone the company paid a large sum for a site on the steps of an insurance office near the west door of the Abbey, on which to mount the camera and machinery incidental to filming the cortège. However hard-boiled news-reel camera-men may be to-day, at least their forebears were not lacking in proper feeling, for the Bioscope camera was heavily draped in black crêpe!

Cadets lined the square with bowed heads and rifles

reversed, and, in the midst of an awesome silence, the hearse stopped some thirty feet from the British Bioscope camera. The camera-men thought it a good opportunity to make a shot and started up their motor. The whirring and grinding made an appalling noise and seemed to split the silence like a watchman's rattle. The late King Edward, then Prince of Wales, started in sudden astonishment and the movie-makers quaked in anguish.

Fortunately for their peace of mind, the film broke and the attempt was abandoned. News-reel camera-men to-day would probably throw up their hands in horror at their lack of push and news sense, but Victorian days were less hustling and, anyway, there was no rival news-reel trying to capture scenes.

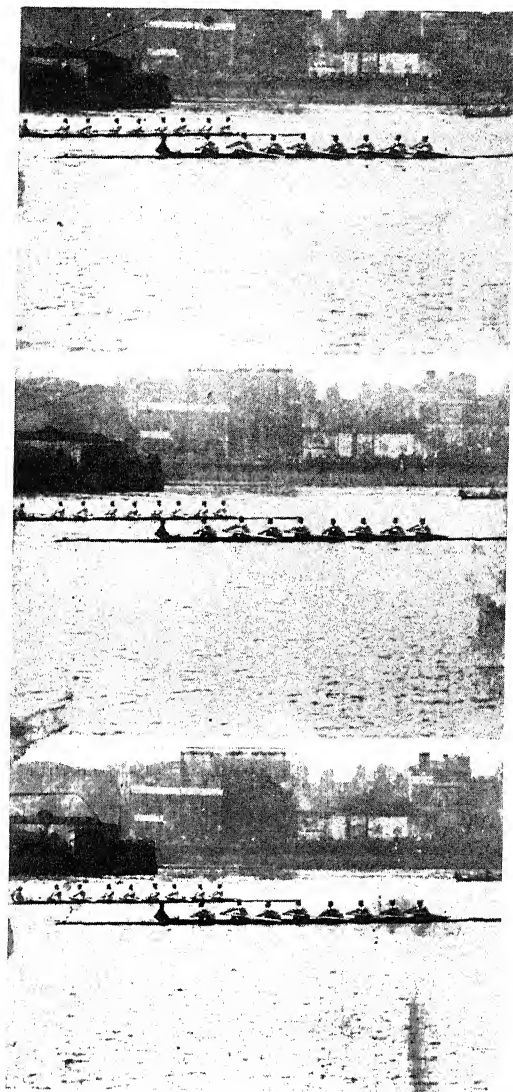
By May 23rd, 1906, Britain had its first real news theatre, called The Daily Bioscope, which opened in the premises formerly occupied by "The Living Pictures," next to the fire station in Bishopsgate Street Without. Daily from 12 noon to 9 p.m., for admission fees of twopence and fourpence, it provided a programme of news items culled from all over the world, interspersed with one or two short comedies. The first programme proudly boasted "The San Francisco Disaster." Actually it depicted scenes of various streets taken in normal times to which comment was added: "Were it not for the flag, this would readily pass for an actual scene showing confusion incidental to the earthquake," and ended with: "All of the sections shown have been destroyed either by the earthquake or by the fire; actual scenes of the ruin and devastation in this

beautiful city as it appears to-day have been taken for us by our American agents and are now on the way to England." "The Olympic Games at Athens," which made up the second half of the programme, really was an exclusive topical.

Special lunch-hour performances were a feature of this novel pioneering effort and the announcement that there would be special children's matinées every Saturday afternoon at three o'clock has a familiar ring.

To-day, when news-reel companies have aeroplanes, motor-cycles and expresses at their disposal, memories of those days seem almost ironical when associated with the presentation of red-hot news. To read, as one can do in early trade journals, of the British Bioscope camera-men filming a Royal Inspection of seamen at Portsmouth and the Boat Race (an actual strip of which is reproduced) on the same day, the whole made possible by 'breakneck journeys by pony chaise,' is amusing. But the news sleuths of to-day should take off their hats to their forebears for having got their news on the screen in record time, despite the lack of rapid transport facilities; it was nothing then for a film to be developed in makeshift equipment in the guard's van while a train was roaring Londonwards.

To the stranger, the news-reel man's ruthlessness is awe-inspiring. From the very first days it had been the tradition to 'get your picture and damn the other fellow.' It is now almost a matter of professional etiquette to tell your rival that you are certainly not going to get pictures of that terrible colliery disaster, news of which has just come through on the telegraph



ONE OF THE FIRST NEWS FILMS EVER MADE.
THE UNIVERSITY BOAT RACE, 1898. REPRODUCED
ACTUAL SIZE; NOTE ABSENCE OF PERFORATIONS

machines, but are off to interview Garbo (whom you have just heard is staying incognito in a peasant's hut in the Shetland Islands), in the sanguinary hope that he will believe you and try and steal your 'exclusive' by going to the Shetlands and leaving you your colliery disaster in peace. British news-reel men are more polite than their American cousins; in the States it is not considered in any way unsportsmanlike to make loud hissing noises near your rival's microphone in order to spoil his recording or even to push him and his camera off a gangway into a dock if you get the chance.

In the old days, if it was not possible to take a film of an important event, then it was permissible to fake it. One enterprising Glasgow exhibitor, when films were very young, bought a copy of the first topical taken of the Grand National. He showed it for several days with enormous success. The following year, though it was impossible for the news-reel concerns to have copies of the film of the race in Glasgow the same night, the enterprising exhibitor was proudly displaying bills announcing: 'Exclusive—The Grand National.' Actually he was showing the year before's race, but, running it at double speed, it was not possible for the audience to detect, through the rain and scratches, that the picture was a year out of date!

Similarly, in 1898, American audiences were thrilled by a news reel showing a naval engagement in the Spanish-American War; the rival fleets approached each other and opened fire and, after a thrilling battle, the Spanish fleet suffered severe losses. Actually, the ships were models firing cannon-crackers and the ocean

was a pond in a back garden in Illinois. That was one of the first forthright fakes; another was the American Biograph Company's film of the San Francisco 'fire' (your patriotic American does not like to admit that such a beautiful city as San Francisco could possibly experience anything so unpleasant as an earthquake, so that disaster is always spoken of as 'the fire'). Actually, there were authentic scenes of the great disaster, but they did not look disastrous enough when shown on the screen, so, from empty cardboard boxes and modelling clay, a colourable representation of San Francisco, seen from afar off, was built in the old piano sale-room at East Fourteenth Street. Then, as the cameras ground, San Francisco rocked and crumbled most realistically and angry flames leapt out and consumed all that remained of the wrecked buildings. It was wonderfully thrilling and wonderfully realistic and audiences watched it spellbound, leaving the authentic pictures on the disgruntled exhibitor's hands. Biograph did not say that the picture was an authentic record, nor that it was not, but it must have puzzled a few people to know why the great City of San Francisco was completely gutted in *two or three minutes!*

The first English edition of the *Pathé Gazette* appeared early in February, 1910, and the present editor-in-chief was its first camera-man, assisted by a man sent over from the French factory. In those days all negative taken in this country was forwarded to Paris by *parcel post*. There it was incorporated into the *Gazette*, which contained a large proportion of Continental material; the prints were then made and sent



THE TRAGIC DEATH OF CLIVE DUNFEE, KILLED WHILE RACING AT
BROOKLANDS, CAUGHT BY THE BRITISH MOVIE TONE NEWS CAMERA



THE BATTLE OF SIDNEY STREET. REPRODUCED FROM THE CONTEMPORARY
GAUMONT GRAPHIC NEWS FILM OF THE SIEGE.

JANUARY 3, 1911

to England, also by parcel post—a leisurely procedure which appears comical to-day.

By 1912 the Pathé staff had increased to four, and by this time the *Gaumont Graphic* had made its appearance and had obtained one of the earliest scoops of news-reel history: "The Battle of Sidney Street," the camera-man penetrating right into the danger zone in order to get thrilling pictures of the astounding duel between the besieged bandits in the house in Stepney and the police.

To-day each company proudly boasts of scoops, scoops which are more rare but more thrilling than those upon which the journalist prides himself, for the journalist writes of what he has just seen, while if an item is a to be a real scoop to a news reel the camera-man must have been turning the crank of his camera at the exact moment the unexpected occurred.

The Pathé men still talk of their exclusive shot of the Clement Bayard airship disaster. The airship burst over Farnborough Common while the Pathé camera-man was actually turning. The Movietone men, too, still talk of the Lee Bible racing car crash. Their camera-man was determined to get close-ups of the cars as they went roaring past. As the American ace crashed to his death the Movietone man went on turning. The film was blotted out at the actual moment of impact, when the camera-man lost his life.

President Roosevelt probably owes his life to the fact that he stepped forward to pose for the Paramount News at Miami just as his would-be assassin opened fire. Roosevelt smilingly moved to one side of the plat-

form when the camera-man, L. Hutt, asked him to pose at the same instant as Zangara started shooting. Hutt secured shots of the attempted assassination, the surging crowd, Zangara struggling in the hands of the police, an interview with the woman who seized the assailant's gun, and then chartered the only aeroplane available and got his film to New York several hours ahead of all the other companies. That is what is known to the news-reel camera-man as 'scoring a beat.'

When William Fox visualised the enormous improvement which sound would bring to the news reel, it is safe to assume that not even he foresaw the almost unbelievable impetus that it was to give to the screen newspaper; the old rehashes of ship launchings and cross-country runs which used to make up the silent reel are at last beginning to disappear. The news reel is, in fact, becoming a news reel indeed—interviews, topical happenings, disasters, international events have, through the medium of sound, given screen news a far wider field. Perhaps the most significant angle is the tremendous popularity attending theatres showing nothing but news and interest shorts in a programme lasting an hour, at admission charges of 7d. and 1s.

It is not quite accurate to say that there is only one way in which the cinema differs from every other form of entertainment. If the educational films of the cinema have their counterparts in the 'talks' of the B. B. C. and news reels in the news summaries, at least not even the B. B. C., let alone the 'legitimate' theatre or concert hall, can offer anything remotely approaching that delightful fantasy—the cartoon film.

Such novelties first found a place on the screen as early as 1906, but appeared only spasmodically.

By 1911 they were appearing more regularly and the McCay cartoon, "How a Mosquito Operates," had something of a vogue in the educational field, fantastic comedy subjects having still to make their mark, but by the time the War overtook America, nearly all the cartoons from that country were humorous subjects.

The Lantz-Bray series, "Colonel Heez-a-Liar," set a fashion in romancing which has been steadily followed ever since, and in 1917 Pat Sullivan introduced "Felix the Cat," a lovable feline who even had a song written in his honour—"Felix Kept on Walking"—and seemed all set for a permanent place on the screen until a mouse popped up and put his nose out of joint.

1917 also saw the first coloured cartoon, a Bray production which, repeating earlier cinema history, had each separate little photograph painstakingly tinted by hand. The same year ushered in Bud Fisher's funny little wise-crackers, "Mutt and Jeff," and Van Beuren's "Æsop's Fables"—a subject which only could have come out of America, for it treated the famous fables in a 'popular' 'debunking' style.

Anson Dyer, working for Cecil M. Hepworth, made the first serious attempt to turn out a regular supply of British cartoons in 1918. His subjects embraced Shakespeare brought up to date (thus Romeo and Juliet were caricatured as the screen idols of that day—Charles Chaplin and Mary Pickford), and a more juvenile series called "Bobby the Scout."

The same year in America saw an event which, out-

wardly, didn't look like an event of any importance at all, yet it was ultimately to cause hundreds of thousands of people to alter their attitude towards the cinema, to bring a new meaning to the word cartoon, to give the cinema an art form unparalleled in the history of entertainment and, incidentally, to sound the death-knell of "Felix."

A series of novelties appeared called "Laugh-O-Grams." Really they owed very little to the cartoon idea and a great deal to the apt play of words in the subtitles. Yet they are highly pertinent to this chronicle, for the producer was none other than Walt Disney, creator of Mickey Mouse, Minnie, Pluto, Donald Duck, Horace Horsecollar, and all the other glorious portraits of animals endowed with human attributes which go to make up the ordinary Mickey Mouse Cartoon.

Disney was born in Chicago on December 5th, 1901, of Irish-Canadian and German-American ancestry. As a boy he lived with an 'ever-moving' family, but finally stayed six years on a farm in Missouri, where he became acquainted with the barnyard characters which were to stand him in such good stead later on. When he was sixteen, he went to France to drive an ambulance, one which became quite well known to the troops, for it was adorned all over with drawings.

In October, 1919, back from France, he got a job as a commercial artist in Kansas City. He had to draw hens on nests, baskets overflowing with eggs, hens hatching-out dollars—one can see the direct descendants of those drawings in any Mickey cartoon to-day. He received £10 a month for this, but he only

had to do the rough ideas—other artists did the finished pictures. The job only lasted three months and then Disney was fired and he hired himself to a couple of printing firms and designed theatre ads. and letter-heads. Then he got a job doing advertisements at £2 a page for a newspaper, and joined forces with 'Ub' Iwerks, himself a famous screen cartoonist now, but who was then a young apprentice artist out of a job. They managed to struggle along, Disney doing the layouts and Iwerks the lettering and detail.

They made £25 between them the first month, then Disney got a job with the Kansas Slide Company at £7 a week. Iwerks carried on with the newspaper job for a time, but ultimately left to help Disney. Disney, fired with the ambition to make animated cartoons, was allowed to take home an old cinematograph camera and arranged a little studio in his father's garage, where he experimented for some time. The Slide Company animated the figures by the old-fashioned method of mounting cut-out arms and legs, pivoted with a pin, on the figures. Disney picked up a book in a public library and learned there was a better way of giving the figures movement—arms and legs painted on sheets of transparent celluloid and superimposed over other celluloid sheets bearing the picture of the head and trunk, a wash-drawing on cartridge paper being put beneath both to provide a background. By this method it is not necessary to make a complete drawing for each phase of movement, but only to paint the moving portions on the uppermost piece of celluloid and to keep changing the top sheet as demanded by the action, the background

beneath always remaining the same permanent wash-drawing.

He made a 200-foot reel of events in Kansas City by this method and sold it to a local theatre for sixpence a foot.

This gave Disney the idea of making fairy-tale cartoons and, with the help of several young artists during their spare time, made "Red Riding Hood." To give added novelty a real girl was hired to play the heroine and the photographic images of her were superimposed on drawn backgrounds.

Modestly, Walt Disney only aimed at renting the film to churches, children's clubs and similar institutions.

The available capital amounted to less than a hundred pounds, so Walt and his brother Roy did everything themselves, writing the scenario, building the sets, drawing the cartoons and directing and photographing the shots of the human 'star.' Roy was camera-man and picked up the elements of that craft as he went along, keeping an eye on Walt, who gave advice in a whisper so that onlookers on location should not guess that they were raw amateurs. It took him six months and was 500 feet in length. It was successful and Disney threw up his job and, with three thousand pounds as capital, started a company—The Missouri Corporation. Seven cartoons were made, but the purchasers went broke and so did the Missouri Corporation.

Flat broke and in debt—his company had paid no salaries for six months before it became insolvent—Disney set out for Hollywood in August, 1923, with £8 in his pocket, and tried to learn film production from

A to Z, by offering himself as a director, but discovered that Hollywood wasn't anxious to take a chance on an unknown newspaper cartoonist. Eventually he scraped around and made a song film for an organist and got enough money to buy an old camera. For the next fortnight he went round taking pictures of babies and selling the prints to their proud parents, developing and printing the pictures himself so as to make the biggest profit possible.

He had brought with him one of the fairy-tale cartoons made by the defunct company, and he tried to interest Hollywood in it. Everyone assured him that their New York office would probably be interested, but Disney had no money to take it to New York. Finally, he sent it by train 'on spec.' Weeks passed and nothing happened and so he started to make little topical joke reels, Laugh-O-Grams, for Pantages, the California Theatre owner. Then Margaret Winkler, in New York, saw the fairy-tale cartoon and sent out an order for more like it.

During the next four years Disney made sixty fairy cartoons, combining photography with cartoon backgrounds, then twenty-six "Oswald the Rabbit" subjects, then he split with the Winkler interests and they continued "Oswald" themselves.

This left him two or three artists, including 'Ub' Iwerks, and nothing to do. He had to have a new character, so he invented "Mortimer the Mouse." When the idea was put up to the renters they laughed at Mortimer, not with him, and Disney decided to re-christen him Mickey.

Actually, Mickey had been born eight years before in Disney's imagination. It was when he was working in the Kansas City advertising agency. He often used to work long after the rest of the staff had gone. When he worked until midnight he would often hear scratching noises in the metal-wire waste-baskets where the girl clerks had thrown their lunch-boxes. Mice were having a buffet supper and with nothing to disturb them but the scratching of the artist's pencil, they would grow daring and come out and play around him as he worked. Disney was so fascinated by their antics that he 'adopted' a family of ten in a cage, fed them, played with them and even tamed one, so that it would sit on his drawing-board.

Disney set to work on his new character with zest and everything looked rosy when the first 'short' of the new hero was ready to be put on the market. Unfortunately for Disney, the Warner Brothers decided at that moment to revolutionise the film industry by introducing pictures which talked.

It was the phase of sound-picture madness and poor old Mickey was looked on as the dumbest thing ever. No one would look at a silent picture, let alone commit themselves to hiring a whole series of silent cartoons. The first picture, "Steamboat Willie," occasioned no comment, neither did the next. So Disney went out to beg for the use of sound apparatus with which to synchronise his next film, but everyone was far too busy adding dialogue to their own already-made silent dramas to listen to his plea.

At last, in New York, an independent concern agreed

to synchronise "The Op'ry House" for him. Even then Disney's troubles were not over. No one saw any possibilities in sound cartoons, but somehow, at last, Mickey was sandwiched into the bill at the Colony Theatre, New York.

Its success was instantaneous. Overnight, Mickey was hailed as a new star and cartoons, from mere fill-ups in a programme, jumped into prominence as an integral part of every self-respecting programme, and Mickey Mouse's name, as well as that of his originator, figured in glass letters over the canopies of the world's cinemas.

With success assured, Walt Disney broke from the tradition which had always insisted that cartoons must have one central comic figure to link them together and started to make Silly Symphonies. The first one, "The Skeleton Dance," was just as big a hit as the first Mickey Mouse subject. Continuing to make movie history, Disney produced the first coloured Silly Symphony, "Flowers and Trees," in 1932.

To-day Mickey is housed in a spacious studio of Monterey design, the largest sound-cartoon studio in the world. It includes two large music-scoring studios, a lavishly-equipped projection room and a recording stage and quarters for one hundred artists and additional comic strip illustrators who draw the Mickey Mouse cartoons which are syndicated in newspapers.

Altogether two hundred people are on Mickey's payroll, yet he himself draws no salary. He delights cinema audiences in eighty-eight countries every week and it

is computed that more people, far more people, in fact, see the latest Mickey Mouse picture than ever saw "Hamlet" in the three hundred years of its existence!

The profits from his productions, and royalties from the use of his characters, amount to £120,000 a year. No wonder Disney has accorded him the signal honour of allowing him to 'Present' the "Silly Symphony" cartoons, as the main title of each bears witness—"Mickey Mouse presents Walt Disney's" . . . etc.

It is not generally realised that "Silly Symphonies" are not merely cartoon films to which a musical accompaniment has been added. Each picture is made with all the exactitude of the most spectacular 'musical.' When the first rough theme has been evolved, it is turned over to the 'writers,' who plan the continuity and produce all the rough sketches of the main action. A set of these is then passed to the music department and composers set about 'scoring' the story outlined with suitable music.

The rough musical 'score' and story are brought to a conference and both are combined, all the uneven gaps and jumps being straightened out. Then a 'work chart' is made out containing details of every single piece of action and every beat of the music in the 750-foot film.

The separate photographs which comprise the film move through the projector at twenty-four 'frames' a second. The number of pictures is adjusted to correspond with the musical score, so that each beat falls on a definite photographic piece of action.

The 'working chart,' therefore, must be mathematic-

ally accurate. When Walt Disney is satisfied that this is so, art and music departments work separately, the former to make the 7,000 drawings on celluloid necessary to 'animate' the story in terms of action and the latter to record the music, beat by beat, as laid down in the 'chart.' When both are finished the sound track is simply printed on the margin of the film containing the pictures, for if the chart has been faithfully adhered to, both music and pictures *must* synchronise.

How long the cartoon will remain a field for pure fantasy is a matter of individual speculation. No one seems to have attempted the exploitation of topical world events on these lines, or to have used the cartoon simply as a means of expressing pictorial beauty apart from humorous content, or utilising it for the telling of dramatic, as distinct from funny, stories.

Such developments are still locked in the future of the films, and it is fascinating to speculate just what that future may be.

CHAPTER THIRTEEN

BEFORE looking into the future, it would be as well to survey the working of a film studio of to-day to get an insight into the making of a modern talkie.

Nearly everyone wants to see inside a film studio, and, because of the high pressure at which studios work, comparatively few are granted the privilege. Perhaps it is this very difficulty in getting inside to see how it is done that makes the present generation regard a studio as a glamorous building full of all sorts of fascinating secrets and carefully guarded tricks of the trade, and they are not far wrong.

Certainly a film studio is full of glamour, not, however, to the casual visitor. True, he sees actors playing scenes in snippets in front of the camera, he sees the lights spring to life or die out at a word of command. He hears technicians talking an unintelligible but tantalising jargon. But over and above all that, he sees and hears things which are beyond his comprehension. Why, for example, does a boy smack two sticks together every now and then; why are typists at work right alongside the players; why is it, when things are apparently going along smoothly, everyone goes into a huddle and then decides to do no more work for a time; how does the Director imagine he will be able to get a full-size locomotive and carriages to move

out of the studio (apparently he does think so, for the visitor sees him making shots of a girl waving good-bye to her fiancé as the immovable train disappears round an imaginary curve), and why is it shots are taken of actors walking down a street when there is no street there but only a perfectly plain blue background, and why do actors say "Listen to the howling of the dog" when there is not a sound to be heard?

To get to the bottom of all these mysteries, the visitor would have to become an actor for a time. Let us follow a Small-Part Player through his routine.

First of all he receives his Call, which is the studio's notification that his services will be required at such and such a time on Stage 3. This Call may be a notice posted on the studio call-board, if he is already working there, or a telephone call to his home, or a printed post-card.

Most players are called for 8 o'clock, to be "ready and made up on the set by 9." When he arrives, his first objective, after letting the casting director or assistant director on the production know that he is in the building, is the Make-up Department.

Unlike stage actors, film actors do not apply their own make-up. In order to obtain photographic uniformity, the studio decides upon the exact shades of colouring to be used, and sees that they are used by employing make-up experts to apply them.

Our Small-Part Player is taking a 'straight' part, which means that he requires no special artifices of make-up, such as gold-beaters' skin gummed over his eyes in order to make them appear sightless, or scars

conjured up with collodion, which shrivels the skin quite realistically, nor does he require thin strips of rubber to be pasted from the outer corner of his eyes to a point above his ears in order to make him appear an almond-eyed Chinese, nor any of the other tricks of the make-up man's amazing craft, amazing because make-ups have been known to take as long as seven hours to apply (such as that worn by Boris Karloff in the "Frankenstein" pictures), or, having taken several hours to build up, could only be used for two or three minutes before the cameras without risk of the artist finding he had lost the use of his facial muscles.

Though film make-up is applied for the same reason as theatrical make-up—that is, to cover facial blemishes and to make the face appear that of a healthy person, despite the terrific amount of light being shed upon it—film make-up is not grease-paint. Instead, it is a paste which comes out of tubes like tooth-paste. The colours used are all the varying shades of tan. The day when film actresses applied green paint to their eye-lids is gone for ever. Modern film negative demands a much greater approximation to nature, so that, at first glance, the Small-Part Player, after coming from the make-up expert's hands, looks like a very sun-bronzed young man.

Women, however, are permitted a very dark purple lip rouge and a milk-chocolate-coloured eye 'shade' in addition to the tan.

Unless there is some special dress to be worn, the Small-Part Player goes straight into the studio.

Over the door is a red electric lamp and a notice

which reads: "No admittance when red light is showing." Or perhaps there is a more elaborate indicator which reads: "Rehearsal," "Recording," "Shooting—No admittance," for people may enter during a rehearsal provided they do so unobtrusively. If the studio orchestra is recording the musical background to a scene, a visitor entering will not be heard by the microphone provided he does not blunder in noisily. But to enter while a scene is actually being shot is simply not allowed. The intruder's footfalls would record on the film, so quiet is the interior of the sound-proof stage.

The stage itself is simply a huge shell, empty save for the scenes (or sets, as they are called) and hundreds of lamps like searchlights. There are masses of cables on the floor, a glass-fronted signal-cabin affair, the camera, some small trolleys fitted with motor tyres, a desk with a typewriter on it, and a portable dressing-table where the make-up man repairs the ravages which even the best make-ups are likely to experience during the day.

At this early hour a couple of girls tapping away at typewriters seem to be the only people actually getting down to their jobs. Inconspicuously, though, quite a lot is going on.

That steady droning noise is the ventilating plant pumping washed air into the stage in order to ensure perfect photography. It will cease when filming actually starts.

The young man who keeps saying, apparently to nobody, "Kill forty-two and try thirty-three. No!

Kick forty-two again, take thirty-three out and swing nineteen over to me," is actually talking to unseen electricians upon a wooden gallery running round the top of the set. Every lamp is numbered, so that the Camera-man has only to refer to each light by its number in order to get the difficult job of lighting the set done with a minimum of confusion.

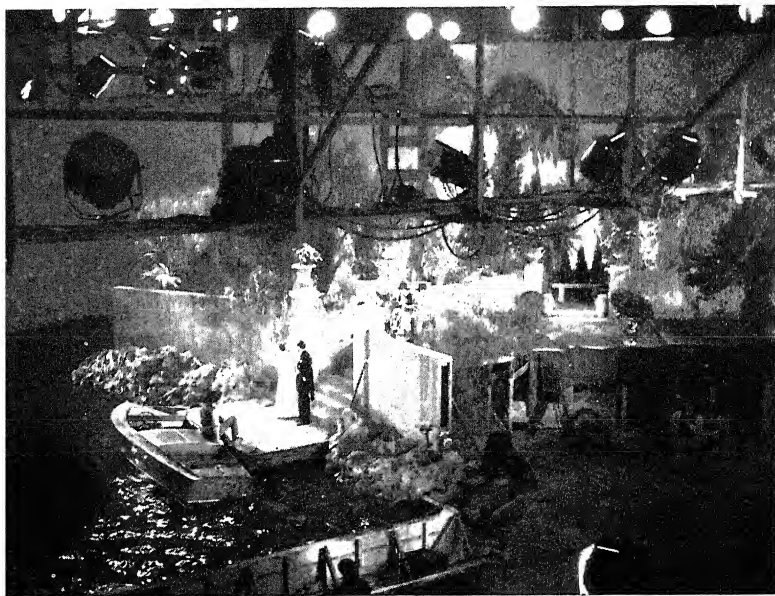
Even now number nineteen is not right. "Give me a nigger on this side," the Camera-man orders, but instead of the negro one expects to see, a stage hand gets a blackboard mounted on a rod and stand, and adjusts it beside the light at such an angle that its rays will not directly strike the camera.

Another man is strolling about criticising everything on the set in a most captious manner. He says he doesn't like the oil-painting over the fireplace, a fine landscape, and would much prefer a portrait, and he doesn't like the flower-vases—"They look like presents from Ramsgate. Can't we have something quieter?" And as for the door of the room—It is far too light! "Tone it down quite a lot; it ought to be as dark as the floor, if not darker."

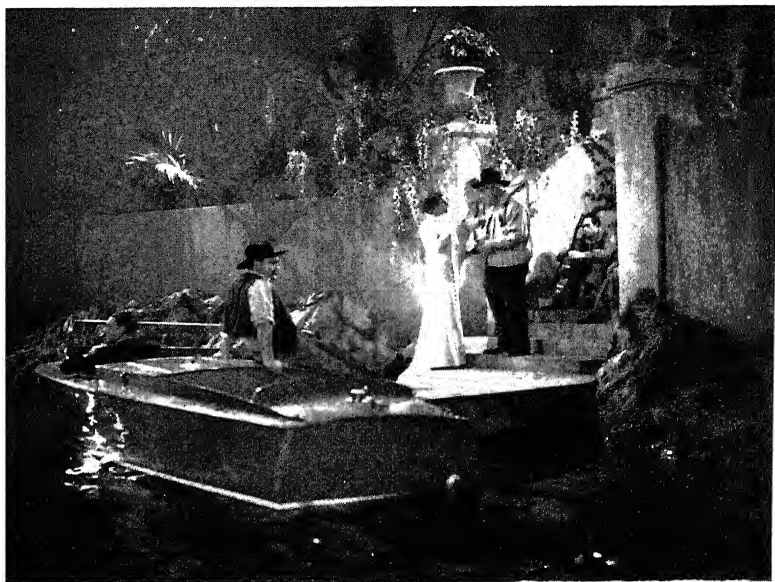
The oil-painting is taken away and another substituted, and the flower-vases are replaced by more tasteful ones.

If the Small-Part Player were new to his job, he might be excused for thinking that no film could be taken to-day because the door is going to be repainted, and that, as every householder knows, takes at least half a day.

But he is an old hand and hardly glances at the men



THE SCENE AS THE STAGE HAND SEES IT



—Courtesy Radio Pictures.

in white coats who now appear and, with a paint-sprayer worked by an electric motor, blow quick-drying dye all over the door with a vapour gun and have the whole job done in ten minutes.

The critical man who is poking his nose into everything is the Art Director. There is a popular misconception that the Art Director is a man paid by the studio to ensure that their productions attain a high artistic level in the matter of story, acting and general presentation. Actually the Art Director is a scenic designer, and his job is looking after the sets. Hidden in the administration offices you will find his headquarters. It is a room lined with books, cuttings, photographs and notes, all filed under easily identified headings, such as "Railway Stations—London, Wayside, Continental, American," or again, "Restaurants—West End, Open Air, Road House, Snack, Quick Lunch, Cafeteria, and Soho."

This is his reference library. On drawing-boards are being set out working details for the construction of forthcoming scenes. Scattered around are rough drawings in pencil and wash of suggested settings. In odd corners are roughly-made cardboard models of scenes.

The Art Director must be a practical architect as well as an artist, pure and simple. Sets often undergo hard usage, and must be designed so as to stand something approaching normal stress.

Down in the studio the Small Part Player is learning his lines. Unlike the stage player, the film artist, though he may know the story from beginning to end, does not learn his actual words until a few minutes

before they are spoken in front of the camera. Stars study their parts overnight or even for several days beforehand in order to get the feeling of a part, but the lesser players merely mug up their lines in a few minutes, safe in the knowledge that no scene lasts more than a minute and their contribution to it may be but five seconds or less.

The copy from which the actor learns is a hundred or more pages of roneoed foolscap bound in printed covers. It contains some three hundred or more 'scenes'; every shot taken by the camera, however brief, constitutes a separate scene, even though scores of them are taken in the same setting.

This shooting script starts with the title of the film, the credit titles to Director, writers and cast, and ends with the final fade-out. In between is a description of every movement which the camera is required to make, a word picture of each set, detailed particulars of the action, and every line of dialogue spoken by the characters. The whole thing, with the exception of the dialogue, of course, is written in a technical jargon baffling to the layman.

The Director now arrives on the set and a conference starts. The Small-Part player is told what he is to do and the degree of emotional tension at which the scene is to be played.

Pictures, for reasons of economy, are shot out of sequence—that is to say, if Scene No. 1 and Scene No. 69 both take place in a telephone-booth they are shot one after another, no matter what other action comes in between. This intermediate action is cut into

the film later on in the Cutting-room, so that all the scenes fall into their right order. If this was not the practice, it would mean the telephone-booth set would have to stand idle in the studio for several days or even weeks while the company filmed all the scenes coming between 1 and 69.

The Small-Part Player may be enacting the role of a man who is putting up a losing fight against adversity. It is up to the Director to tell him how much of the fight he has lost in the scene about to be shot, for this scene may, in the finished picture, come before those shot last week, and the Small-Part player is therefore not required to show so much hopelessness to-day as he did last week!

It will readily be apparent that the actor's lot in a film studio is harder than that of his stage brother. There can be no building up to a climax for the film actor. He must switch his emotions on and off to order. For this reason the success of any picture depends far more on the Director than the actors. He is the one man who can visualise the story as a whole. Hence the almost endless conferences which mark the average day's shooting.

The Camera-man now requests the Small-Part Player to take up his position. A tape-measure is run from the actor's top waistcoat button to the lens of the camera and an assistant sets the focus of the lens accordingly. The camera-man takes a peep through the finder on the camera and now demands some alterations to the lighting. "Hit Miss Blank with a baby," he orders, referring to an actress who has just come on the set.

In studio parlance 'to hit' is to throw a light on to a player. A 'baby' is a small spotlight. Every one of the lamps on the cat-walk round the top of the set has its name. There are juniors, loops and bon-bons, all of them small lamps of slightly varying types, while the bridge which holds two or more lamps together is a trombone. Rifles are spotlights with a narrow beam, broads are lamps in which two huge incandescent bulbs burn side by side, while arc lights for throwing daylight through the windows of sets are, to the studio technicians, suns. Even the boxes scattered about the floor, fed by high-capacity cables, which redistribute the power over a network of smaller cables to the various lights, have their own nickname—spiders.

The amount of current burned in a studio would light a fair-size town. A household burns 500 kilowatt hours a year; a large American film studio consumes a million and a half kilowatt hours a month. That is why the studios, both British and American, run their own power-stations.

All preliminary adjustments having been made, the actors rehearse their parts. When this is over, yet another technician takes a hand, a man who comes unexpectedly out of the glass-fronted cabin affair, which gives him a view all over the stage, and begins to talk about the sound. He has for an assistant a youth who swings the microphone. The latter is suspended on a contrivance not unlike the booms swung across roads at frontier posts on the Continent. Everywhere the actor goes, the boom, with its hanging microphone (the mike generally in use is about the size and shape of a

vacuum-flask), goes too, but always just far enough above the actor's head as to be out of the picture as seen by the camera.

The Sound Engineer makes some suggestions, and a line of dialogue is tried over again. Back he goes into his cabin and listens. When he is satisfied, he announces the fact, rather eerily, over a loud-speaker.

The Director is all ready to go now. He sits down in his canvas-backed chair and an assistant operates push-buttons which ring a warning bell for silence throughout the studio, light the red warning lamps over the outer doors, cut off all telephones on the stage, and otherwise completely insulate the set from all external interruptions.

Human nature being what it is, there is always someone who wants to finish a sentence of whispered conversation after the bell has rung, and the Assistant Director has to shout an admonition—"Bell's up!"

Now the scene is rehearsed once more, this time in complete silence.

"How is it for you?" the Director asks the Camera-man. The latter, who has been watching it through his finder, gives his approval. "How is it for sound?" the Director asks the air, and out of the air comes the Sound Engineer's answer, via his loud-speaker: "O.K. for sound." He heard the Director's inquiry by way of the microphone on the set.

"Camera!" exclaims the Director. One hears the movement of the switch as the Camera-man starts his camera and the film goes rustling through.

"Action!" says the Director (his voice being trimmed

off the sound-track afterwards in the cutting-room).

But instead of the acting starting, a boy in rubber-soled shoes springs in front of the camera. In his hands he carries a board with the name of the film on it, the Director's name, the number of the scene, and the number of the take, each repetition of a scene being a differently numbered take. All these particulars are photographed on the beginning of each shot so that the scene may be identified in the laboratories when it is developed. Imagine the chaos that would ensue in the developing-rooms of a studio with several pictures in production at once if there were no means of identifying each particular shot.

As the boy reads the particulars on the board out loud, "Scene 124, Take 1" (he says this aloud so that the sound-track may likewise be identified), he lifts a piece of hinged wood fixed to the top of the board and brings it down with a sharp smack. This is known as the clapper, and the boy who wields it the Clapper Boy. The purpose of the smacking noise is another aid to the technicians, who will subsequently handle the film. It is their synchronisation mark, and records clearly on the sound-track not only to the ear, but, if you are an expert, to the eye because of the distinctive mark it makes on the sound-track. Thus the cutters, when they come to assemble the film, can tell at a glance where the track of any given scene begins.

It should be understood that, in the studio, pictures and sounds are made on two separate strips of film. Later, both pictures and sounds are printed on to one strip of film for release in the cinemas. The synchronisa-

tion-mark enables the printers to place the beginning of the sound-track in dead synchronisation with the beginning of the film containing the pictures, so that both pictures and sounds correspond. Then the sound of the Director's voice, the Clapper Boy's voice, the smack of the clappers, and the picture of the board bearing the scene number are all cut off and discarded.

One of the girls now leaves her typewriter and slips quietly into a seat beside the Director and starts a stop-watch fixed to the arm of her chair. She is the Continuity Girl or Floor Secretary.

The Clapper Boy springs quickly out of the camera's range and the actors begin their dialogue and the scene is played through to the end.

Even to the casual observer there is a great difference between film and stage acting. One of the tersest ways of summing up this difference is the analogy of a funnel. On the stage the actor is at the narrow end of the funnel (the stage) acting outwards, as it were, to the wide end or auditorium. In the film studio the actor is at the wide end of the funnel (the set), acting inwards to the lens of the camera.

His technique is much more subdued. His voice must be used naturally and without the declamatory methods of the theatre. The fractional uplift of an eyebrow to denote quizzical interrogation that would be lost on all but the first six rows of the stalls of a theatre can be employed effectively in the studio, for when it is magnified on the screens of the cinemas it will be discernible to every member of the audience.

As the scene finishes, the Clapper Boy once more

springs in and smacks the stick down on the board, thus registering on the sound-track that it is the end of the scene and scissors can be applied to it without risk of mutilating the final line of dialogue.

The Continuity Girl, referring to her stop-watch, tells the Director that the scene took fifty-three seconds to play.

The Director asks both Camera-man and Sound Engineer if they got the scene all right, and, receiving their assurances, the Assistant Director calls to his unseen assistant: "Break the bell!" Immediately a bell resounds twice and all is hustle and bustle again, the Director, actors and technicians going into another conference.

The girl at the typewriter starts hammering away busily, writing down full details of the scene—the time it took to shoot, the slight deviations made in the dialogue, such as "So I said to him" instead of "So I said to Jack" (this again is to help the cutters, for, in order to assemble the film properly, they must be able to compare the scene as it is handed to them with the shooting script, and if the shooting script is departed from in the studio, they would be all at sea without a detailed note of all the changes).

More important still, they are typing out exactly what the characters wore: if Mr. So-and-so had a cigarette in his hand, whether Miss Blank wore earrings, and whether Mr. Dash came in round the right or left side of the table. All this is necessary because every scene must dovetail exactly with the preceding one and the following one. It would, for instance, sur-

prise the audience very much if, when Mr. Dash was seen coming along the street, he bought an evening paper, yet, when he entered the room and threw it down on a chair, it had changed into a morning one.

The Assistant Director is filling in his 'dope sheets.' These are printed forms comprising a complete log of the production, setting out the names of the actors taking part, whether or not any of them were late or failed to turn up, the number of feet of film exposed on the scene and the number actually required in the finished picture to make it play the right length of time, and countless other purely technical details required by the Producer, the Producer being the man responsible for co-ordinating the work of all the departments concerned in the production.

In addition, the Assistant Director has to act as ambassador for the Director in all dealings with the stage crew, wardrobe, property department, electricians, carpenters and the front office (as the business department is known), and generally see that the picture goes in the can and does not fall behind schedule. Thus he relieves the Director of all routine duties, and so free to give rein to his imaginative and creative abilities.

The Director has now decided to play the scene in a different way, and the Small-Part Player hears the Assistant Director calling: "Everybody on the set, please!"

Once again the bell rings and all is silent.

Out comes the Clapper Boy again. This time his board reads: "Scene 124, Take 2."

As soon as the boy has jumped clear of the camera,

Miss Blank says: "How I hate Sundays in town!" Our Small-Part Player puts his evening newspaper on the chair as the microphone swings away from Miss Blank and hovers just above his head. "They are rather a bore," he agrees.

It is all very quiet and conversational. The only touches of unreality are the lines of lights above the walls of the three-sided room and the group of strained technicians watching from beside the camera.

Slowly the latter begins to move forward with the Camera-man and his assistants seated upon the trolley. Its rubber-tyred wheels are fitted into wide wooden channels laid on the floor, for this is a tracking shot, which means that the characters will be gradually brought into close-up on the screen just as if the audience, watching in the cinema, had moved forward into this room.

Men in tennis shoes push the camera forward, feeding cables to it silently hand over hand.

Miss Blank starts speaking again, and the microphone is noiselessly swung back over her head. The Small-Part Player answers her, and it is swiftly swung back over him. "Are we going to the Mannings' to-night?" he asks.

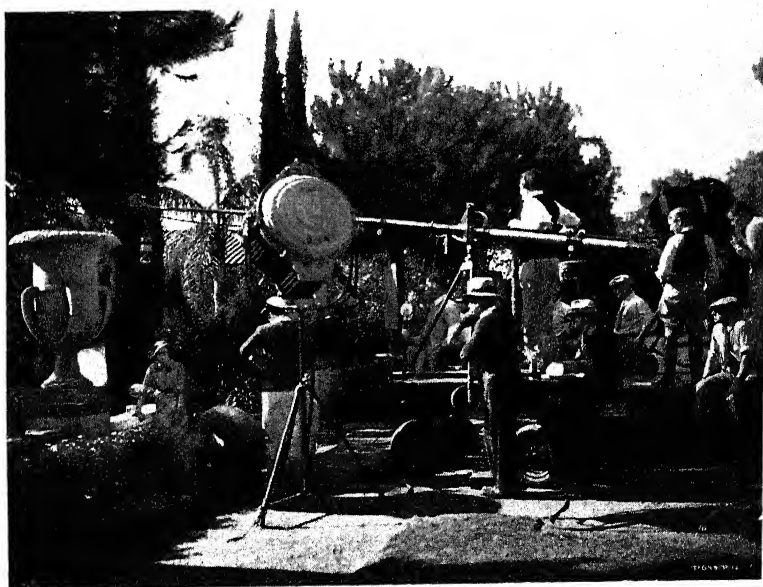
"Cut! Cut! Cut!" shouts the Director, and there is an immediate babel of sound. "It's Channings', not Mannings'." The Small-Part Player is apologetic, but nobody takes much notice. Scenes are always being spoiled.

The Clapper Boy steps in front of the camera with a board bearing the letters "N.G." This 'no good' sign is



—Courtesy United Artists.

THE SOUND RECORDER “MIXES” THE SOUND IN HIS CABIN OVERLOOKING
THE STUDIO FLOOR



—Courtesy Radio Pictures.

to tell the people in the laboratory that the strip of film is useless and need not be printed.

So the Scene starts again; this time the Clapper Boy chants: "Scene 124. Take 3."

Smack! goes the clapper at the end of it, and "Fifty seconds" reports the Continuity Girl, referring to her stop-watch.

Over in a corner a group of technicians start an argument. The group gets bigger. The Assistant Director joins it, then the Director.

A casual visitor can hardly join it, but the Small-Part Player can, and does. Outwardly this is one of those inexplicable halts which assail all film production at intervals of two or three hours, and which may last from ten minutes to an hour or two.

The newspaper Mr. Dash brings on is all wrong, it seems. In the dialogue Miss Blank says: "How I hate Sundays in town," yet Mr. Dash, the Small-Part Player, brings in an evening newspaper, and there are no evening newspapers on Sundays.

The Property Master (or Props, to give him his more usual name) is sent for and reprimanded. His defence is that the shooting script merely called for 'a newspaper.'

The well-known film studio game of alibis is now indulged in. In Americanese, everyone starts passing the buck.

The 'gaffer' in charge of the electricians has the lights switched off. Experience tells him the delay may last for an hour.

The newspaper is essential to the dramatic action,

but no one can find a Sunday newspaper. After a delay of three-quarters of an hour, fruitless scourings of local newsagents to try and get a back number of last Sunday's paper, a solution is hit on. Why not alter the dialogue to: "I hate Bank Holidays in town"? The evening paper will then be quite in order.

And so it is. A girl who has seized on this delay to go round collecting subscriptions for a wedding present for one of the girls in the Hairdressing Department who is getting married on Saturday retires, and the electricians stuff their football coupons back in their pockets and the lights spring to life again. The actors take up their positions once more, the microphone is swung above them, and the Clapper Boy alters his board to Scene 124, Take 4.

The delay may have represented a waste of £50 in overhead expenses, but such hold-ups are almost impossible to avoid. A trained dog may decide to forget all its training at a critical moment, an imitation paved floor may sound like the rattle of a machine-gun when walked on in the silence following the ringing of the silence bell. Each delay and its cause are noted by the Assistant Director on his dope sheets under the heading of Delays. If too many of them centre round the work of one department or individual, drastic steps are taken. Film companies are supposed to be notorious for wasting money; actually films can only be produced by the trial-and-error method, but, like other business men, film executives keep a close eye on how the money goes.

As the Clapper Boy announces "Scene 124, Take 5" we can take leave of the Small-Part Player. He will

probably repeat Scene 124 two or three more times yet before perfection is obtained and the board is changed to Scene 213, Take 1, same setting but the day after Bank Holiday.

Let us take a look round this three-dimensional room, which has been built with painstaking regard for detail, only to be shown as a two-dimensional room when it reaches the cinema screens.

There are no painted canvas theatre flats here. The doors are fitted with real locks, the shrubs and flowers to be seen through the French windows are the real thing, uprooted from a nursery garden, and the books in the bookcase are real volumes. On the stage the locks would be painted on the door flats, the trees would be made of canvas stretched round half-hoops and surmounted by painted cut-out foliage mounted on fish-net, and the books but blobs of paint on canvas. The reason for this difference is that, because the film picture is two-dimensional, it must depict three-dimensional objects if it is to convey an impression of reality.

The set itself is built of three-ply wood, faced with yellow paper to cover all joins. Its rectangular panels are picked out with picture-rail strip painted aluminium colour, which represents gilt when photographed. If the set were of the interior of a castle or church, it would be given a coating of plaster, stippled and coloured, to represent stone-work.

Walking round the set we discover the wonderful vista of lawns and terraces seen through the windows is a huge photograph mounted on battens at top and bottom and slung by ropes from the studio roof. En-

larged up from a half-plate photograph to these gigantic proportions it looks grainy when seen close to, but the camera will re-record it on the film as what it originally was—a view seen in a private park. Rows of shops, country lanes, offices seen from a first-floor window in the City, are all reproduced in this way to act as backings for doors and windows.

These gigantic enlargements, measuring thirty feet in length and twenty in height, take the place of the theatrical scene-painter's back-drops, but with the advantage that, as they are actual photographs of three-dimensional views, they are entirely true to nature and, seen on the screen, look like the real thing.

Outside the stage, tucked away in a corner of the lot, are the scene-building shops. Band-saws hum through three-ply wood incessantly, cutting out windows, doors, fireplaces, ships' cabins, hotel reception desks and railway compartments. These will be taken in sections into the studio, bolted together and painted on the spot.

Near-by is the plasterers' shop where the 'mud-pie boys,' as Americans call them, are busily engaged in making plaster casts of paving-stones, gas-stoves, fruit, fire-dogs and ornately carved church pews. In their slack time, if any, they make plaster casts of real brick walls in easily handled sections. These, when tacked together, form the fronts of houses for street scenes.

Next comes the power-house, with its huge generators and spotless floors and dungaree-clad figures busy with oil-cans.

Away from the hum of its motors is the open-air

stage. Built life-size, there is a street in a bleak mining town up North, the old Vauxhall Gardens, a twisting lane leading to a village war memorial in Devon, an evil-looking short cut to a broken-down chapel in Dalston, and the entrance to the Customs Sheds at Liverpool. They are laid out in maze formation so that the end of the short cut in Dalston just cuts across the far end of the mining town's main street and serves to round it off. Vauxhall Gardens does the same for the Devonshire lane.

The houses have real glass in the windows, real lace curtains, real doors and door-knockers, but their reality ends. Open one of these doors, the one that bears the brass plate announcing that its occupant is an insurance agent, and you will fall over the other side of the doorstep on to grass and stubble and find yourself in a tangle of wooden struts, for the rooms you can apparently see through the windows are nothing but squares of plywood painted dark photographic grey and roughly nailed to the supports behind.

Some of these curious sham-fronted byways have been up for two or three years. Rain and sun have played havoc with their paint and plaster and plywood, but the next time a director wants a spacious street with real sunshine the workmen will come along and put a new face on things and the mining town up North will become a back street in Bloomsbury, the camera on its truck will once more trundle its silent way along wooden channels laid over the imitation stone sets, and the hollow walls resound to the shouted directions of the technicians. Then it will be left

deserted again, somehow sinister in its brooding solitude, like a thriving town left deserted at a moment's notice by its inhabitants because of some impending but nameless disaster.

Close at hand are the vaults, stone and steel store-houses where the films are kept, each one in a glistening round tin or in zinc boxes fitted with an appliance which keeps them in the right degree of humidity, for if films are allowed to become too dry they get brittle and break.

Then there are the laboratories where, in the glow of green or red photographic safe lights, according to whether the film being developed is panchromatic or orthochromatic, figures in spotless overalls watch over and guide the glistening ribbons of film as they are fed through large tanks of developer, plain water and hypo.

In the Cutting Room the film editor and his assistants are at work assembling the strips in their sequential order, trimming Scene 94 and joining it neatly to 95. Here the sound-tracks are joined to pictures, titles inserted at the beginnings and endings of reels in order that cinema operators may identify them at a glance, and doing all the other tasks which constitute the film-cutter's art, for art it is, many a poor film having been saved by the editor's ingenuity in cutting down dialogue and shortening scenes which drag.

Before half a dozen girls there are small machines, each with a little window the size of a cigarette-packet in its front, through which rolls of film may be viewed, for these are projection machines in miniature.

Each girl watches her film through until the point

she is waiting for comes on the tiny screen, when, by a touch of a switch, the machine stops and she is able to cut out an unwanted portion or insert an additional scene. Then, starting up again, the Moviola, as it is called, continues to unwind its story.

The Cutting Room, at a superficial glance, is a prosaic place, yet, like most other departments of the movie workshop, it has a romance all its own. Many of Erich von Stroheim's extravagant masterpieces have been saved, or spoiled, according to whether one's powers of picture endurance are the normal two hours or the abnormal twelve, in the Cutting Room.

In the Mack Sennett studio at Edendale they used to tell the story of how one of Sennett's pictures was saved in the Cutting Room purely by accident.

The picture was "Molly-O," one of Sennett's biggest successes, as after events proved. When the cutters had done all they knew to it, it was still seven reels in length. Six reels was then the absolute limit for the length of a comedy, and everyone in the Cutting Room spent restless nights wondering how they could possibly cut another thousand feet out of it without ruining its continuity.

At last Sennett told them to give up trying, and a cutter was told to dispatch the seven cans containing it to a Santa Barbara theatre for its pre-view that night.

Several hours later the cutter, finishing his day's work on another picture, put on his coat and prepared to go home. At the back of his mind was a heart-felt hope that the audience at Santa Barbara was enjoying "Molly-O," despite its inordinate length. As he went

out of the door he saw a can marked "Molly-O, Reel 5" staring him in the face. Tearing off the lid he discovered that it actually did contain Reel 5, and that, through an oversight, he had forgotten to include it with the rest.

Clutching the can he sped across the lot, jumped a motor-cycle and was soon speeding towards Santa Barbara, hoping against hope that "Molly-O" was still wending its way through the opening reels on the screen.

The motor-cycle ran out of oil and, when this was remedied, a corner taken at speed wrenched off a tyre.

When the unhappy cutter at last reached the cinema, the audience was just coming out!

Sennett was standing in the foyer and spotted the cutter before the other could dodge him.

"That was a stroke of genius," said Sennett, smacking the cutter on the back. "I wouldn't have believed it possible to leave a whole reel out and yet retain perfect continuity—you certainly saved the picture!"

Next day Sennett promoted the man to head cutter and gave him a rise.

It was a long time after that Sennett learned what really happened, but Sennett's sense of humour, fortunately for the cutter, is not confined to slapstick.

Not far from the Cutting Room is the Sound Library. Stored in hundreds of tins are little reels of film, each bearing sound-tracks of distinctive sounds. Cutters are engaged in grafting sounds on to the sound-tracks which come up from the studio. Their job is to fill in the soundless gaps in the picture. It may be music which they insert, or the sound of a soda-water syphon filling a glass, or a door slamming.

In the library at the Gaumont-British studios at Shepherd's Bush there are 1,300 classified sounds embodied in 1,188,000 feet of film. At a moment's notice the custodian can produce a strip of film bearing the mew of a cat, the roar of a bombing plane, the noise of a mirror being smashed, or the hiss of escaping gas. If the Library lacks a sound it goes out and gets it. For jungle scenes in "King of the Damned," sound engineers spent a night in the Zoological Gardens, one of their number meeting with an unusually warm reception in the parrot-house, and all but having to leave his apparatus there because of the repeated attacks made on him by the outraged inmates.

For "The 39 Steps" the railway authorities lent the engineers a stretch of line at Peterborough and a train, while for "Bulldog Jack" the whole of one Sunday was spent on the now disused British Museum station recording the thunder of passing Tube trains.

Not all the sounds used are real. Often a fake is much more effective than the real thing. Thunder, for example, is of such low frequency that it is almost impossible to record it at all. Potatoes tipped on to a side-drum make a good substitute. The rumble of a mine explosion can be imitated by rolling cannon-balls down a slightly inclined trough made of thin wood. Racing the engine of a Fordson tractor gives a perfect aeroplane noise, while a gently run sewing-machine sounds exactly like the engine of a car ticking over.

The Projection Theatre is a cinema in miniature. This is where the day's rushes—*i.e.*, the scenes shot during the day—are screened for the Director's benefit,

so that he may select from all the takes of each particular shot the one which he wishes to be included in the film as it is finally assembled.

The Still Room has nothing to do with brewing. This is the Still Photographer's headquarters. Portraits of stars are taken here and photographs of scenes taken in the studio are developed and printed. Later these are offered for sale to theatre-owners hiring the film for display in frames at the entrances of their cinemas. Stills (they are called that to distinguish them from movies) are pictures taken on a plate camera and are not enlarged-up portions of the actual film.

Of the Publicity Department not much needs to be said, except that its work no longer consists of inventing untruths about pictures and players in order to create newspaper sensations. Newspapers are wary nowadays, and the publicity man with a too vivid imagination gets short shrift. The days of harum-scarum publicity seem to be over in the film business. It is a long time since a publicity man got himself into hot water for getting the authorities to loan him a detachment of soldiers to escort the cans containing "The Phantom of the Opera" from Waterloo Station to Wardour Street, or since Tom Mix, in full cowboy regalia and mounted on a black horse, rode up the steps of the Mansion House to meet the Lord Mayor. When an American expert mooted the idea of throwing magic lantern slides advertising a film from a projector in a car near the Queen Victoria Memorial on to the front of Buckingham Palace, the 'boys' decided it was about time to call a halt.

More startling than any of the imaginative flights the Publicity Department could achieve are those conjured up in the Special Effects Studio—more startling because they appear to have the very stamp of truth upon them. Special Effects is the innermost holy of holies, the place where all the fakes are conjured up, fakes which lift the film right out of the realms of the stage play and make it a veritable modern *Arabian Nights' Entertainment*.

With the equipment in Special Effects the Director is able to make a stay-at-home star walk across Broadway by bringing Broadway to the star instead of taking the star to Broadway. The producer can have conjured up for him all the temples, mountain ranges and burning Zeppelins for which the scenarists crave, and all for a matter of a few pounds instead of a few thousands.

Every film, almost without exception, contains faking in some form. But in productions such as Wells's "The Invisible Man" it reaches its zenith.

The easiest trick shot to comprehend is the model, though it is one of the most laborious to prepare. As its name implies, it is a model built to perfect scale and peopled, in some cases, with tiny dolls moved on concealed bands and with little motor-cars running on hidden electric rails, the whole photographed in slow motion to get smoothness of movement.

In its more elaborate form the model plays a large part in giving realism to life-size settings, but before examining its scope in this direction, it would be as well to make the acquaintance of the 'glass shot.'

The object of this fake is to make a small painting

on glass do duty for the upper portion of a life-size set. Let us suppose the Producer wants to enact a scene outside St. Paul's Cathedral. He cannot go to the actual spot, as to do so would cause too much congestion of the traffic.

Obviously the actors can only play their parts on the steps and in the doorway of the Cathedral. The dome and all that part of the building above the doors are merely so much scenic makeweight, therefore the Producer contents himself with building only the steps and the doors and the lower portion of the portico.

The set which springs up in the Special Effects Studio is St. Paul's Cathedral from ground level to a height of ten feet. It is just as though a knife had come and sliced off all the upper portion of the building at one clean sweep.

Now a sheet of optical glass is placed four feet in front of the camera and an artist starts painting on it. Through the glass he can see the ten-foot-high set of the bottom portion of the Cathedral. Very carefully, following the same perspective, he paints the upper portion of St. Paul's on the glass so that it exactly matches up with the real set to be seen through the lower, and unpainted, portion of the glass.

Seen through the lens of the camera, the real set and its counterfeit upper half painted on the glass appear to join and form one continuous whole. Actors can play their parts on the steps and in the doorways, the camera recording their movements through the clear glass, while, on the screen, the towering height of the Cathedral will loom above them with nothing to

indicate that it is a painting on glass except that no pigeons are to be seen flying round the tops of the fluted columns.

This fake has one drawback. Changes of lighting on the set are apt to throw the painting out of gear, the shadows failing to match, so an elaboration has been evolved. It is called the Schufftan Process, and is a combination of model work and the glass-shot theory. Instead of glass, however, a mirror is placed in front of the camera at a slight angle. Beside and slightly behind the camera is a model of the upper portions of houses. The silvering is now scraped from the back of the lower half of the mirror, leaving clear glass. Through this clear portion the lens of the camera is able to take in the actors and the truncated set on the studio floor, while the reflection of the model in the mirrored portion of the glass supplies the upper half of the set.

In this way the train in "Rome Express" was made to pull out of the Gaumont studio at Shepherd's Bush. The actors waving their farewells were real enough, but the train was a scale model standing on a small platform beside the camera and reflected into the mirror; so were the station roof and the 'country' to be seen beyond the confines of the station.

An even greater stand-by than either model or glass shots for the film technician is the effect to be obtained by taking a film of a film.

This is how it is done. The Producer wishes to stage a scene in which two people are riding in a car. If the Director goes out on location to take this, it means securing a private road, deviating traffic in order to

avoid congestion, taking a great risk with the weather, and many other minor difficulties inseparable from outdoor work. So the car is placed in the studio. Behind it is a semi-transparent cinema screen and a projector behind that.

The projector is threaded with a reel of film already taken on a moving car on a country road. The actors climb into the car, which is mounted on rockers to give it a slight sway and also to enable free play for the steering-wheel. As the players pretend to drive along, the film in the projector is thrown on the screen behind them. The camera now starts up and if one looks through the finder one sees a couple driving in a car and country flashing past behind them. This 'country' is in monochrome, of course, but that does not matter, for the camera which now starts to record the composite fake as a whole is only taking pictures in monochrome.

The uses of this system of back projection are legion. The scenery which flies past a railway carriage window is a film taken from a real moving train and projected, from behind, on to a semi-transparent screen just beyond the windows of the set of a railway carriage in the studio.

In Eddie Cantor's picture, "The Kid From Spain," the star was made to do prodigious feats of daring by dodging about in front of a back projection screen on which shots of a charging bull were projected. In some scenes he actually came to grips with the bull, these shots representing yet another side of the Special Effects Studio's work, for the bull in this case was a bull's hide and head, mounted on rubber in order to give muscular

stretch, stretched over a framework. This contrivance was fixed to a bicycle. A man inside the bull's hide rode the bicycle round the set, manipulating the bull's rolling eyes from inside and dipping and lifting the head as its rubber-tipped horns menaced Eddie Cantor. So long as the camera-man did not let his lens go any lower than the bull's chest, all was well, but a tremendous amount of film had to be exposed in order to get satisfactory and convincing shots. On the screen the episode lasted eight minutes; its proportion of the cost of the production as a whole was £60,000.

Another ingenious device in use in the Special Effects Studio is known as the Dunning Process, the invention of a young American, Dodge Dunning, the man with what must surely be the most appropriate Christian name in the business.

Most fakes can only be shown on the screen for a few seconds at a time before the audience becomes aware that what they are watching is a fake, but this defect is absent from the Dunning Process.

It is a system by which any given background can be superimposed round actors in the studio. Without leaving the studio, they can be shown walking down Broadway or parachute-jumping. If it is desired to show an actor in an aeroplane crashing earthwards, there is no need to take him out of the studio nor is it necessary for the actor to be able to handle a plane. A camera-man goes up in a real plane and, as the pilot puts it into a spin, pictures are taken of the whirling ground below and the spinning sky above. The negative thus made is developed and printed on amber film.

In the studio an aeroplane fuselage is put in front of a plain blue background on which strong blue lights are thrown.

The positive print of sky and ground is now threaded into the camera, together with a roll of fresh unexposed negative film. When the camera starts both the positive and the unexposed negative will go through the camera together.

The actor climbs into the aeroplane in the studio and amber lights are thrown on to him and on to the dummy aeroplane. The camera starts, and this is what happens inside it: the blue light behind the actor acts as a printing light and prints the background of sky and ground which the positive film bears all round the man and dummy aeroplane on the fresh negative now forming. The man's body and the plane being between the blue-lit background and the camera act as a printing mask and as no blue light, obviously, passes through them, no part of the already-made background positive is printed through them on to the new negative. At the same time the amber light on the actor and plane enables both to be photographed on the new film in the ordinary way. The result is a perfect double exposure made in one operation in the studio and one which can be held on the screen indefinitely without the fake being apparent.

Many of the most cherished effects of the film-fakers are very simple. Many of the most baffling illusions in "The Invisible Man" were simplicity itself. It cannot be denied that some of the tricks were very complicated, and in some scenes, I believe, retouching of the film by

hand was resorted to—a very laborious practice when one remembers that each separate photograph is little larger than a postage stamp—but in several instances suggestion was all that was required to create the impression that an unseen person was present. A thread attached to a rocking-chair created the idea in the minds of the audience that the invisible man was present on the set and rocking himself to and fro, the illusion being completed by Claude Rains's voice, recorded as he stood just out of the range of the camera, carrying on a conversation with the other characters.

To create the illusion that the invisible man had sat down on a chair, it was only necessary to place a rubber air-cushion, covered with a cretonne cover to disguise it, on the chair seat and suddenly deflate it by letting the air out of it by way of a thin tube on the side farthest from the camera.

At one point in the story the invisible man mounted a bicycle, rode madly down a street and then, apparently, fell off it. The cycle used was of the fixed-wheel type. Above the street set, out of range of the camera, a long overhead gantry was built. From this the cycle was suspended by thin wires so that its wheels just touched the ground. By pulling a wire running over guide wheels, it was possible to rush the cycle down the street, its pedals whirling madly. When it reached the end of the overhead gantry the wire was dropped and the cycle crashed over. Again the sound of the invisible man's voice helped to create the illusion that he had met with a nasty spill.

In shots where he was seen to light a cigarette and

help himself to drinks, double photography was used, pictures being taken of a man in a black velvet skin-tight covering standing in front of a black velvet back-cloth taking up a cigarette and lighting it and pouring out a drink from a decanter. The negative simply showed a cigarette floating up into the air, a match-box mysteriously rising, a match coming out of it and being struck and applied to the cigarette suspended in mid-air. This negative was then placed over scenes taken in the ordinary way and, by the use of printing masks, overprinted on to them.

By this and similar means it was possible to show a shirt flapping about wildly in mid-air as the invisible man donned it.

Some of the shots puzzled the experts for a time, particularly that in which the invisible man, swathed in clothes from head to foot, started removing covering bandages from his face, in front of a mirror, revealing that he had no head. The removal of the bandages could have been done fairly simply by the black velvet 'skin' and black velvet background method, but to show a reflection in a mirror as well was, the experts knew, technically impossible.

It was some time before those not in the know realised that what appeared to be the invisible man's reflection in the mirror was actually nothing of the sort, but a clever adaptation of the back projection method. The man was not in front of a mirror, but in front of an empty frame behind which a semi-transparent cinema screen had been placed and on to which an already-prepared scene of the bandage removing was projected

by a projector behind it. The man before the empty frame then proceeded to follow every one of the movements made by his photographic image on the film he was watching. Carefully timed, it gave the perfect illusion that every one of the actions made by the man in the foreground was being reflected in a looking-glass.

The footprints which the invisible man left behind him as he ran through the snow appeared equally baffling.

A camera was set up facing a stretch of snow-covered ground across which a stage hand had walked, leaving a clearly defined set of footprints. In the camera the film was put into reverse so that it ran past the lens in the wrong direction. Then a foot or so of film was exposed on the footprints. The camera was stopped and a stage hand began filling in the first footprint with snow. Then a few more inches of film were exposed and the camera stopped again. More snow was sprinkled into the first footprint until it was level with the surrounding snow and quite indistinguishable. Some more film was exposed on this, and the camera stopped yet again. The second, third, fourth, fifth and all the other footprints were dealt with in the same start-stop fashion, until the last few feet of film were exposed on an expanse of virgin snow, every one of the footprints having been filled in.

By this laborious method the technicians obtained a strip of film which, when run continuously, showed a set of footprints in the snow rapidly filling up one after the other and completely disappearing. As the camera had been stopped while the stage hand did his work of filling in, his part in the operation was not apparent.

But actually what the technicians required was a stretch of snow in which footprints miraculously appeared, one after another, as though an invisible person was walking across it. The film having been taken in reverse, however, it was only necessary to project it in forward movement to obtain the desired result. Thus it started on the screen with the last shot made in the camera, namely, the expanse of clear snow, and went on to show first one footprint appearing, then the next, and the next until a complete set of footprints stretched right across the screen.

The mysteries of the Special Effects Studio are practically inexhaustible. Some believe that the future of the film lies in this very ability to ignore space and time, and that the pioneers who conceived the early trick films, with their mysteriously appearing and disappearing ghosts, had stumbled unknowingly on the one factor which makes the film different from all other art forms.

That is, if one concedes that the cinema is an art form. Certainly the modern studio is a combination of workshop and laboratory, but the people who labour in it have something to express which cannot be measured by the yard-stick or put upon the scales. No amount of time-clock-punching will evolve a witty line of dialogue or enable actors to epitomise the spirit of a love scene.

The film business still speaks of itself as 'the industry,' not 'the art.' This is probably not because the film business does not consider itself to be an art—very likely it has never given serious consideration to the matter at all—but because it is still using quite a lot

of the terms evolved when film was sold at sixpence a foot and the producer was a manufacturer engaged in turning out a commercial product.

But does it naturally follow that it will always remain the somewhat gauche kid sister of the other arts? It is evolving a new art form all its own. The insight into the work of the Special Effects Studio alone shows that here is a form of expression which, while appealing both to the eye and ear, knows no limits of space and time, needs pay no attention to the usually accepted unities of the drama, and can make even an H. G. Wells fantasy come true.

What will be the ultimate goal at which the film will arrive? Can there, indeed, be an ultimate goal?

With an insight into the making of a film of to-day, we are better equipped to look into the cinema of to-morrow.

CHAPTER FOURTEEN

WHAT of the movies of to-morrow? This book has been in the nature of a history of the movies, and even as it goes to press, its history is still being written in actual events.

Television is one of those magic words with which the imagination likes to play. To many, not realising that it is actually at hand, it seems merely a pipe-dream of the future. Actually the first television pictures were shown at the Coliseum as far back as 1929, when pictures five feet high were shown daily to audiences as an item in the variety programme, cinema history thus repeating itself.

Again, in June, 1932, five thousand people at the Metropole Cinema, Victoria, London, saw the Derby televised on a large screen and saw the finish of the race before thousands actually present on the Downs could ascertain which horse had won. It was an historical event comparable with that far-off show at Bath which ushered in Friese-Greene's films.

On a screen nine feet by seven, the audience saw the horses quite distinctly as they came up the straight; it was possible to discern the black-and-white figures of the jockeys and distinguish them by the designs of the colours they wore. Distance was annihilated and time knew not the lag between occurrence and presentation, which is part and parcel of the news-reel, newspaper or

radio broadcast. True, the picture flickered, but not as badly as the first film flickered; there was no rain or jerkiness or that peculiar defect which marked the early movies which caused one to see the heads of the actors at the bottom of the screen and their feet at the top.

Programmes which followed contained dancers, entertainers, cartoonists and broadcasts by famous film stars and Atlantic fliers, but nothing was quite so thrilling as that relaying of the Derby from Epsom Downs to Victoria at the exact instant that it occurred, unless it was the novelty of having the manager, on the stage, asking the audience to suggest things they would like the person depicted on the screen to do. Picking up a telephone, the manager phoned the Baird Television Studio in Long Acre, and the audience saw the man on the screen answer, heard its instructions repeated, and saw the player immediately comply with all their requests—taking off his collar, lighting cigarettes, blacking his face, and so on.

Samuel Goldwyn recently said: "I saw a talkie televised over a distance of five hundred miles, and reproduced with perfect sound on a screen three feet square. The reproduction of the picture and its dialogue was as good as you would get in the best equipped cinema . . . I can visualise the time when five or six talkies are televised every night on various wavelengths. You will put, say, a shilling in the slot of your receiving set and tune in to the particular pictures you wish to see and hear."

Only a few weeks after Sam Goldwyn had made that

assertion, the Gaumont British film, "I Was a Spy," was televised by the latest Cathode ray process, by which the projected film is divided up into light strips and relayed as signals. It was projected at the rate of twenty-five pictures a second, on a screen nine inches square, to a meeting of the British Association at Leicester. The result was almost flickerless, even though a telephone wire was used because short-wave transmission was necessary.

At first glance the only benefit which television will bring to the cinema will be the elimination of the complicated delivery system by which films have to be dispatched and collected from cinemas once or twice a week, the films being televised from a central broadcasting station, but, in the news field, it will do more than bring the Derby or the Boat Race or the Cup Final to the screen while they are actually occurring; it will enable stay-at-homes to accompany expeditions to the Poles, to sit beside pilots on epoch-making flights; in short, to experience real life adventures as they are occurring on the land, on the sea, or in the air, while they are actually taking place.

What a thrill our fathers received when the Daily Bioscope, in Bishopsgate, invited them in to see history that had just been written; think of the thrill our sons may receive when the news-reel theatre of to-morrow invites them in, for a charge of a shilling or so, to spend an hour on a world flight while it is actually taking place. The hazards of exploration and endeavour, with all their unexpected thrills and twists, will be followed by audiences with greater excitement than has ever

been aroused by a news-reel, for there will be no question of having already read about it in the evening paper; it will actually be taking place as they watch—the sudden decision, the unforeseen peril, perhaps, even the unexpected disaster. It is conceivable that people will drop in at a television news theatre on their way to work to see how some explorer or intrepid aviator is progressing, pay a second visit at lunch-time, and look in again on the way home to see him arrive at his destination.

“History repeats itself” is an almost meaningless cliché nowadays, but it cannot be denied that early cinema history is being repeated at this very moment in television’s efforts to establish itself in popular favour.

John Logie Baird, the ‘father’ of television, wheeled his first experimental television apparatus round a hotel dining-room on a truck before the astonished guests in order to get people interested in it. He is an ex-school-fellow of Jack Buchanan’s, and the famous stage star backed him through the early years and gave the luncheon at which the young Scotsman tried to put over his invention. Baird tried for months to sell it in America without result. A year or so ago he looked like being beaten, yet Baird Television is now, in the opinion of most prophets, the one which will come out on top of the pile.

In the story of John Logie Baird one can find parallels with those of the inventors of the first moving picture cameras and projectors. As a youth, his health was not good, and he passed through a variety of voca-

tions, including those of jam manufacturer and factor of a patent sock which he had invented. Bad luck and ill-health dogged his footsteps, and, in 1922, he had to live in the milder climate of the South Coast. In an attic room in Hastings he made his first experiments in television, using his landlady's rickety wash-stand for a work-bench and biscuit-tins, pocket torches and tea-chests for apparatus.

In 1923 he put a personal ad. in a London paper, inviting co-operation in his theories. It had no result. Neither did a broadcast appeal of 3,000 letters which he sent out to doctors. But somehow he struggled on, and a few years later he televised the first human face at his work-room in Frith Street, Soho, a stone's throw from Wardour Street, headquarters of the film industry.

Just as Friese-Greene and, later, Robert W. Paul showed the first demonstrations of films projected on a screen to humble policemen, so the first person ever to be televised was an office-boy from a firm who had its offices below the room occupied by Baird. The office-boy—his name was Bill Taynton—was not at all impressed and got up and walked off when Baird slipped into the next room to see how the picture came through. The inventor experienced horrible disappointment when he found the screen blank, but when he discovered his 'subject' had got up and walked away, a half-crown bribe soon straightened things out.

Just like Friese-Greene, too, Baird had to sell some of his early experimental apparatus to buy further appliances. It is floating around now Heaven knows where. But the apparatus with which he successfully

televised human faces in detail in January, 1926, may be seen in the Science Museum at South Kensington. The following year he opened the first experimental television transmitting studio, "2 TV," in Motograph House, Upper St. Martin's Lane, a building which once housed four or five prominent film companies, from which he 'radiated' pictures to Harrow.

It must have been about this time that I met him—a meeting which he has no doubt entirely forgotten. He was interested in getting publicity for his brain-child, but it was tremendously difficult to get editors to see its possibilities. We only exchanged a few words, but I have an indelible impression of him as a sparsely built, delicate-looking young man with a wild mop of fair hair, a stained pair of flannel bags and a weary-looking tweed sports coat. And while we talked his eyes were looking at things miles away and—I had the awkward feeling—miles 'above' me.

Isidore Ostrer's name has been mentioned earlier in these pages as the financial genius behind the Gaumont British Corporation. His name may go down in history as the man who made television possible. Already he has sunk fifty thousand pounds in the Baird system during the past few years and has been instrumental in opening the first 'public' television studio in this country, at the Crystal Palace, on the Sydenham heights. Who knows but what Baird's first studio in Long Acre and the first 'non-secret' studio at the Crystal Palace may not go down in the history of entertainment with those other brave pioneering efforts—Edison's "Black Maria" and Paul's "Glasshouse"

studio at New Southgate?

In other directions, too, one can find a direct analogy between the movie's early struggles and those of television. June, 1934, saw the opening of the first television peep-show. It opened at Blackpool in a small theatre on the front and was run by a Mr. Bailey, of Benton, and a Mr. A. Kay. The system employed was the B.B.C. one on a 30-line basis. Just as with Edison's kinoscope peep-show machines, the picture was visible to but one person at a time. For an admission charge of sixpence, one sat in front of the scanning device and televised oneself on to a screen fifteen feet away. Is there not a distinct link between this and Mr. Lane's attempt at opening the first picture theatre at Kingston-on-Thames in June, 1896?

And just as the movies made their first home in the music-halls, so is television likely to form part of cinema programmes in the near future. Two or three years ago a Huddersfield cinema included in the architect's plans a room for housing television apparatus, and now a super-cinema, seating 2,500, to be built in Everton Valley, Liverpool, will, when completed, be the first television-equipped cinema in Britain.

Possibly television will form an integral part, if not the whole, of our 'moving picture' programmes in the future. When television does arrive, the problems of stereoscopy and natural colour will again present themselves; thus does moving picture history advance in ever-widening circles.

And television may not be the ultimate goal at which the moving picture will arrive. The synthetic film star,

created entirely by man's hand and brain, may one day become an actuality.

Built up of hundreds of thousands of composite photographs, each, say, representing the perfect points of a dozen women, it will be fashioned in much the same way as one of the Mickey Mouse cartoon films, while the accompanying voice will be the work of a technical expert. In other words, it will be possible to build up a personality which never had actual existence and endow it with a voice created in the laboratory!

Film-goers who have seen "King Kong" know that it is possible to create a synthetic ape and give it life-like movement, but few realise that it is also possible to draw sound graphs (such as are recorded by the sound-on-film system) and photograph them on the edge of the film, and by this means manufacture a voice, one capable of singing higher registers than those ever attained by the greatest soprano or endowed with a timbre more fascinating than anything ever uttered by the human voice. Already, in the London offices of an American distributing company, such a voice has been made. It was grafted on to a recent Constance Bennett film. In the picture a reference was made to a Peer; the author thought that he had chosen a purely fictitious name, but it so happened that there really was a Peer with that title. Mr. A. E. Humphriss, the technical supervisor of the firm, cut out the portion of the sound-track on which the offending name occurred and then, on sheets of cardboard, drew the sound graph of another name—this time one that really was fictitious—photographed the sheets of cardboard and

grafted the strip of film containing them into the film, thus giving Constance Bennett's lip movements words which they had never actually uttered. It was a bold experiment, and one which opens up all kinds of possibilities.

The film star of to-day is largely a product of men's minds; make-up experts endow her face with looks which it may not actually possess in real life; hair-dressers and experts on deportment and voice culture all help to build up the personality which the public associates with the star's name. On the studio floor itself the star owes much to the skilfulness of the director and the art of the camera-man and sound recorder. The film star of to-morrow may be nothing more than a few thousand photographs, represented against a background of models, rear-screen projection, Dunning, Schufftan, and other process shots, and the voice the work of skilful technicians who have drawn it on rolls of cardboard. Add to this imaginative flight stereoscopic, natural colour, televised pictures, and a news-reel of events actually happening at the exact instant they appear in the theatre, and the possibility that such things may be built up of light in three dimensions (Edison was experimenting on these lines at the time of his death) and made to *walk up the gangway of the theatre*, and one will have some conception of what the cinema of the future may be like, a cinema that will make the present-day talkies seem as old-fashioned as the dissolving views of yester-year.

Whether television or stars that never had human existence will mark the next forward step of the

'movies,' it seems unlikely that anything can arrest the tremendous forward drive of the colossal industry which makes 'pictures which move.'

The American film industry to-day employs three hundred thousand persons—yet the first American films were shot in a tiny shed made of tarred paper.

Cinemas holding more than five thousand persons are by no means uncommon—the Roxy in New York holds 6,500, the Gaumont Palace in Paris 6,000, and the Trocadero in London 5,500, while the new Film Centre in Moscow, when completed, will have a cinema seating no fewer than 20,000 persons.

One hundred and thirty million patronise the 20,500 cinemas in the United States every week.

A successful picture may be shown in as many as 25,000 cinemas throughout the world, three hundred prints of it being in circulation at one time. Figures are apt to be meaningless, but the audience which a film really plays to can be gauged from the fact that no human actor could appear in half the number of theatres a film may be 'played' in, even though he appeared at a different theatre every night, seven nights a week for thirty-years—a fact which may give the uninitiated an insight into the reason why a film star is a far more famous personage than any ruler or monarch.

The British film industry is now the fifth in importance in this country. It employs 70,000 people and has an annual turnover of ten millions.

And it all started at a penny reading given in Bath when a local photographer, destined to die penniless, showed a picture of a girl who moved her eyes.